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★ Editorial ★

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(A Father in Eclipse)

MILLIONS OF PEOPLE are born obscure and never outgrow it. Tens of thousands, who were capable of doing worthwhile things, achieve obscurity by the masterly way in which they do nothing of any importance. A few, whose accomplishments are of such a high order as would bring them fame under ordinary circumstances, have obscurity thrust upon them by the overpowering luster of the deeds or words of some near relative or associate. The last-named fate befell the subject of this sketch.

Healing the sick seems to have been rather a tradition in the good old Scottish Mitchell family, and a doctor of that clan came to these United States during their early days, and settled in Virginia. To him was born, in the village of Shepherdstown, on May 12, 1793, a son, and they christened him John Kearsley, in honor of the noted colonial physician of that name who was one of his ancestors, probably deciding, at about the same time, that he should follow in his father's footsteps. At any rate, some such decision must have been made before he was eight years old, for at that age his worthy father sent him back to bonny Scotland, to receive his formal basic education at Ayr and Edinburgh, and he stayed there until he was twenty years old.

In 1813, John came back to his adopted land, and began his medical studies under the tutelage of Dr. Kramer, of Jefferson County, Virginia. Shortly thereafter he entered the University of Pennsylvania Medical School, under the delightful and erudite Dr. Nathaniel Chapman, who was one of our pioneer medical journalists, and received his degree in 1819.

But the handsome young Doctor Mitchell was (fortunately or unfortunately) in such a poor state of health that a long sea voyage seemed indicated, so he obtained the post of ship's surgeon on one of the sailing vessels that voyaged to China and the East Indies, and liked it so well that he made three such voyages. During this period he laid the foundation of his literary reputation by writing colorful and interesting accounts of his experiences, which were published in *Graham's Magazine*.

In 1822, being fully restored in health, he established himself in practice in Philadelphia, and also began to teach physiology. Two years later, when he was thirty-one years old, he began to lecture on the institutes of medicine and physiology at the Medical Institute of Philadelphia (the first postgraduate medical school in the United States); in 1826 he held the chair of Chemistry in that school; and in 1833 he

was selected to lecture on chemistry applied to the arts, at the Franklin Institute.

During this period he was married, and in 1829 his wife gave birth to the son (Silas Weir—see CLIN. MED. & SURG. for December, 1928, page 863) whose fame was to overshadow his own to such a degree that he, himself, has been wellnigh forgotten.

In 1841 he was called to the Chair of the theory and practice of medicine at Jefferson Medical College, and at different times was visiting physician at the Pennsylvania and the City Hospitals. The city of Philadelphia twice rewarded him with gifts for his services in times of pestilence.

To the literature of his profession he contributed essays on mesmerism; various spastic conditions; the first paper (1831) on spinal arthropathies; the first (1849) defence of the theory that malaria is of parasitic origin; and various other scientific subjects.

Extraprofessionally, he gained literary recognition by his skill as a writer of narrative, as shown in his travel articles and several historical novels. In 1839, a book of his poems, "Indecision, a Tale of the Far West; and Other Poems" (now practically unobtainable, even by eager collectors) was published. He passed to his rest April 4, 1858, at the age of 65 years.

Surely, a record like this, coupled with the statement of his illustrious son, "He was the most resourceful medical man I ever met," should entitle this capable and versatile early American physician to honor and recognition in his own right, and it is a pleasure to bring him forth from the relative obscurity into which his worthy name has been cast by the dazzling brilliance of his son's career, so that physicians of our day may recognize him at his true value.

He who is plentifully provided for from within needs but little from without.—GOETHE.

Cramped Thinking

WE GIVE PLACE to no one in the matter of reverence for the dicta of genuine authorities in medicine, or in any other field of thought. These great men have arrived at their positions of distinction by means of original and constructive thinking, and are therefore entitled to our attentive consideration when they speak; but, we should never allow their position to hamper us in doing a little original and constructive thinking on our own account, by which means, alone, is there any possibility that we, ourselves, will ever be considered an authority on any subject.

It is not the great minds who have blazed the trails for the progress of modern science and thought who would attempt to limit the scope of thinkers who come after; it is the lesser men, who have accepted the conclusions of the leaders as a *ne plus ultra*, and are ready to cry shame upon any who would attempt to amplify these conclusions and carry them further.

No man can *do* that of which he is unable to *dream*, and no great original research work is possible to any man whose imagination is defective or restricted, or who thinks in tight little hide-bound circles. In order to open up new paths, a man must recognize that, although the work of his predecessors was of the utmost importance, they were not omniscient, and there may be more to learn. Harvey's studies of the circulation of the blood revolutionized the entire concept of the physiology of the great circulatory organ; but Harvey did not know, or pretend to know, all that there is to be known about the blood or its circulation. There are problems along this line to be solved, even to this day.

Columbus, no doubt, viewed with respect the teachings of the authorities of his days, but he refused to let that fact hamper the sweep of his glorious imagination, and his name is now a household word, while theirs are forgotten.

While remembering and giving thanks for the enormous strides which have been made, in the last four or five decades, in the medical sciences, let us not lose sight of the fact that the way we have yet to travel is infinitely longer than the way we have already come, and that the achievements of the future will be made by the men who have freed themselves from constricted thinking and permitted their God-given faculties a chance to range over new pastures.

The doorstep to the temple of wisdom is a knowledge of our own ignorance.—SPURGEON.

American Documentation Institute

DURING RECENT YEARS, the flood of scientific and technical literature has been so overwhelming that, on account of the space restrictions of the technical magazines and

the high cost of printing books and other documents by conventional methods, it has been impossible to make the whole of it readily available to those who might find certain parts of it of interest and value.

In order to meet this need, the American Documentation Institute, ("A.D.I.") of Washington, D. C., has inaugurated an *auxiliary publication service*, whereby the editors of journals in any technical field are enabled to publish, without cost to themselves or to the authors, articles which, by reason of their length or the number of illustrations, graphs, or other supporting material accompanying them, could not be printed in full in the journals without entailing prohibitive expense.

Any editor, after deciding that such an article is suitable for publication in his magazine, makes up his mind how much of it he will actually print in its pages, and sends the rest of it to the A.D.I., where it is placed on file in the Library of the U. S. Department of Agriculture, given a permanent Document Number, and a cost price is set for reproducing it by microfilm (see CLIN. MED. & SURG., April, 1937, page 184), photoprint, offset printing, or any other method which will be least expensive.

The editor then places a footnote to the part he is going to print, giving the Document Number and the prices at which the entire article may be obtained, in the most popular forms of reproduction. The author, or anyone else who desires a copy of the complete article or the accessory material, can then order it directly from the Institute, referring to it by number and remitting the exact cost price of the form of reproduction he wishes.

The first instance in which we have used this auxiliary publication service occurs in this issue, in connection with the article by Drs. Friedman and Ackerman, whose entire paper is eminently worth while, but longer than we are able to publish in our pages.

We hope that our interested readers will make full use of this most modern method of disseminating scientific information, and will tell us what they think of this effort on our part to make available to them, at nominal cost, valuable material which our space limitations prevent us from printing in its entirety.

Individualism is what makes cooperation worth having.—HENRY FORD.

Subsidizing Venereal Disease Control

As long as any disease is considered in any degree shameful, its successful control is quite impossible, because the prudish and ostrich-like public will refuse to discuss it or even to admit openly that such a disease exists. Tuberculosis and cancer were formerly in that category, but are now respectable—*and dimimishing;* psychic disorders are about half way out from under that cloud; while gonorrhea and syphilis are just emerging from the fog of pruriency and ignorance into the sunlight of free discussion and knowledge, where they will become amenable to direct scientific attack.

It is well that the fight against these age-old disorders should now be pushed with the greatest possible vigor, and aside from its tendency to encourage states and communities to look to Washington for the solution of problems which they ought to solve for themselves, the recent Federal grant of $3,000,000, to be apportioned to the various states on the basis of their population, need for Federal aid, and prevalence of venereal diseases, for help in the control of these diseases, should be decidedly helpful, unless most of it is diverted to political purposes (as has happened with a number of other Congressional appropriations for ostensibly worthy undertakings), or unless the spending of this money is placed in the hands of opinionated men who established immunity to new ideas many years ago, or who are obsessed by the fetish of political or religious expediency.

While the problem of venereal disease control is a pressing one, there is another which is closely tied in with it and of even greater and wider importance (that of birth control), which is being treated like a stepchild by all the various governmental health agencies. With the huge sums *(your tax money and ours)* that are being spent for political purposes, a modest appropriation for the popularization of the technics by means of which every baby can be a *wanted* (and therefore loved and cherished) baby, would, at least, give us the worth of our money. It might, however, be well to wait and see how the millions for venereal disease information are spent, before we clamor too loudly for a slice of it for other worthy medical projects. If it turns out to be more "pork" for political jobsters, we already have a spilth of that sort of thing.

Assembly to Study Serologic Tests for Syphilis

THE intensive campaign to stop the spread of syphilis, now being waged throughout the country, makes it imperative that only those serologic tests of proved efficiency be made available to private physicians and health officers. Diagnosis of syphilis must be prompt and accurate. The serologic blood test, becoming positive within two or three weeks after the onset of primary syphilis and remaining positive in the vast majority of untreated patients throughout the entire course of the disease, is the most important evidence of the existence of syphilis.

The American Society of Clinical Pathologists, in cooperation with the U. S. Public Health Service, realized the need for reliable serodiagnostic tests several years ago. The work of the Committee on Evaluation of Serodiagnostic Tests for Syphilis is sufficiently well known to require no comment. It is the opinion of this Committee that its studies of the efficiency of the performance of serologic tests have progressed to a point where material gains would be made by a thorough discussion on common ground, in which all those interested in the control of syphilis through laboratory methods may participate.

Plans are being developed for an assembly of laboratory workers from the entire country. All such workers, both from private, hospital, and public health laboratories, as well as physicians and health officers interested in the control of syphilis, are invited to attend.

The proposed meeting, under the auspices of the Committee on Evaluation of Serodiagnostic Tests for Syphilis, with Surgeon General Thomas Parran, Chairman, is scheduled for October 21 and 22, 1938, at Hot Springs National Park, Arkansas.

The aims and purposes of the assembly will be to consider means and methods to improve and to make more generally available the serologic tests, which are so important in syphilis control work. A special feature of the meeting will be an actual demonstration of the Eagle, Hinton, Kahn, Kline, and Kolmer tests by the originators of these procedures.

Those interested in obtaining further information should write to the Surgeon General, U. S. Public Health Service, Washington, D. C.

NEXT MONTH

Dr. Charles J. Drueck, of Chicago, will discuss the clinical evidences and differential diagnosis of hemorrhoids.

Dr. Abner I. Weisman, of New York City, will offer some highly practical, but little understood, suggestions for the handling of spermatozoa in making tests for male sterility.

Dr. R. de R. Barondes, of San Francisco, will present some evidence and ideas regarding the possible value of autourotherapy in the treatment of cancer of the colon.

COMING SOON

"Treatment of Sexual Decline in Middle-aged Men," by R. L. Gorrell, M.D., D.N.B., Clarion, Ia.

"Sterilizing Diluting Fluid," by J. B. Biederman, M.D., Cincinnati, Ohio.

MIDSUMMER STILLNESS

* *Leading Articles* *

Newer Methods in Schizophrenia*†

By EMERICK FRIEDMAN, M.D., M.S., Greenwich, Conn.,
and NATHAN W. ACKERMAN, M.D., D.N.B., New York City

SCHIZOPHRENIA constitutes one of the foremost problems in medicine today. It dooms its victim to a living death, and signifies an utter ruination of the meaning of his life at a time when, in terms of biologic and social fulfillment, that life should bring its greatest returns. It denies him his right to carry on a social existence; it necessitates his isolation from society for his own and society's protection. To the patient's family it means an incomparable tragedy and imposes a burdensome responsibility. To society it is a colossal human waste and a tremendous economic cost—in the United States over $40,000,000 per year are spent for the medical care of the schizophrenic patients[1].

Additional evidences pertaining to the calamitous significance of this disease can be stated tersely[2]. Practically one in every 10,000 persons living in rural communities, and more than two in every 10,000 persons living in urban centers, are at some time afflicted with schizophrenia and need institutionalization. Whereas from 23 to 26 percent of first admissions to state hospitals are schizophrenic, between half and three-fourths of the population in mental hospitals is made up of schizophrenic patients. This, in turn, is due to the relatively early age of onset and the long hospital life of these patients. It is known that the average length of hospitalization of these patients amounts to about seventeen years—some patients remain as long as thirty or more years. In the United States there are perhaps some 250,000 persons so afflicted, and almost 16,000 new patients are discovered every year.

*In the preparation of this paper, we wish to acknowledge the helpful suggestions of Dr. Bernard Glueck, and the use of the clinical records of Stony Lodge.

†This article embodies the strictly clinical section of a much more exhaustive paper entitled, "The Problem of Schizophrenia: Recent Therapeutic Considerations." The entire paper of 30 typewritten pages, including a bibliography of 63 references, as submitted by the authors and without editorial revisions or corrections, is herewith published, with the assistance of the American Documentation Institute, c/o Offices of Science Service, 2101 Constitution Ave., Washington, D. C., as Document No. 1118, and may be procured by interested persons at a cost of 50 cents in microfilm form. (See CLIN. MED. & SURG., April, 1937, page 184), or $3.20 in photoprint.

Treatment

In ancient times, among the primitives, the witch doctor administered potions and incantations to the mentally sick. In the Middle Ages, fire ovens, purges, leeches, together with shriving, exorcising, and confessionals, were in order for the cure of psychoses. Today, we employ certain chemical and psychoanalytical therapies for mental illness. But even a cursory perusal of the history of the treatment of psychiatric disorders shows that practically every medicament which has ever been used for physical diseases has also been used for mental illnesses, perhaps even more rigorously for the latter than for the former.

Camphor-Metrazol and Insulin Therapies

The results obtained by the camphor-metrazol and insulin therapies, although insufficient time has elapsed since they were first employed on a large scale, are seemingly far more favorable than any of the previously employed procedures.

The majority of European and American investigators[3] of these therapies report between 50 and 80 percent of remissions in those cases whose illness has not endured more than six months. The results in patients whose illness has endured for a longer time showed a very considerable decrease. In patients who had been ill from three to five years and over, remissions occurred very infrequently, with from 30 to 50 percent showing varying degrees of improvement. A previous report by one of us[4] showed that camphor might provide a means for favorably influencing these older cases. As can readily be seen, the emphasis in these treatment procedures must always be upon prompt treatment of the early cases.

Therapeutic Technics

The technics of application of these therapies are established, at present, only in a general way. The procedures should be flexibly modified in accordance with the individual peculiarities of different patients; the doses, the intensity, and the duration of treatment should be adapted to the special needs of each patient, as appraised

by intensive clinical study. Undoubtedly, the specific indications for, and the methods of application of these therapies will undergo much modification as clinical experience and exact knowledge as to the action of these drugs accumulate.

1.—*Metrazol therapy* (Meduna): The patient is given convulsive doses of Metrazol by intravenous injection of a 10-percent aqueous solution twice weekly. Usually an immediate, typical epileptiform convulsion ensues, lasting about sixty seconds. The initial dose is usually 5.0 cc. and subsequent doses are increased by 1.0 cc., if a grand mal type of reaction does not result from the previous injection. The medication is injected into the vein as rapidly as possible each time.

In a recent personal communication, Meduna has described a slight modification of this procedure in that, if a convulsion does not ensue with a given dose, a second injection of 1.0 cc. more than the first is administered within one or two minutes after the first injection. If a convulsion does not then occur, the procedure is repeated the following morning, using the same dose as on the preceding day. Barbiturates or other sedatives are given *only* in the event of repeated seizures. The treatments are usually given in the morning, to the fasting patient. Proper care must be taken lest the patient lacerate his tongue or lips during the convulsion. Meduna recommends that a minimum of 25 grand mal convulsions be tried before the treatment is abandoned as a failure. In favorably responding patients, 3 or 4 convulsions are produced, beyond the point where the patient has attained a remission.

2.—*Camphor-Metrazol Therapy* (Friedman's Modification): The patient is placed on an alkalinizing and hydrating routine (alkaline diet, the equivalent to two tablespoonfuls of sodium bicarbonate three times a day, and a minimum of two liters of water daily) for about a week. Intramuscular injections of sterile, 25-percent solution of camphor-in-oil are then given twice daily.

The initial dose is 16.0 cc. twice daily, and subsequent doses are increased by 4.0 cc. daily increments. If a convulsive episode occurs after any given dose (single or multiple convulsions may occur about 2 to 3 hours after the injection), the injections are omitted the following day and then resumed, starting with the previous convulsion-producing dose. The maximum dose is set at 56.0 cc. After from two to four weeks of this therapy, Metrazol injections are given, using the Meduna technic, but administering injections on alternate days and continuing the alkalinization and hydration throughout the treatment. By this treatment a deliriform, confused state, punctuated by convulsions, is induced, resulting, in favorable cases, in a subordination of the dominant psychotic pattern, and eventually in a "social" remission, if not total recovery.

3.—*Insulin, Hypoglycemic Shock Therapy* (Sakel)*: The present technic consists of determining the individual coma-producing dose by administering insulin subcutaneously, daily or three times a week, to the fasting patient, starting with from 5 to 15 units, and increasing by increments of from 5 to 15 units each treatment until the patient experiences "insulin shock" or coma. This coma dose is quite variable, ranging from 25 to over 400 units. It may change from day to day in certain patients. If the patient arrives at a remission before coma ensues; i.e., during the milder hypoglycemic phases, treatment may be terminated early. The number of comas induced before remission occurs is variable. As many as from 30 to 60 treatments may be administered in a continuous series. Each treatment lasts from 4 to 6 hours or more, and is terminated by the intranasal gavage of sufficient sugar solution, or intravenous injections of dextrose in amounts adequate to neutralize the hypoglycemic effects of the insulin dose administered.

4.—*The Combined Insulin-Metrazol Procedures* (Muller, Angyal, and Gyarfas): Many workers, including Sakel, have empirically given convulsive doses of Metrazol to patients in the first, second, or third hour of hypoglycemia, after the patients had failed to respond to insulin alone. This modification has been utilized chiefly in the catatonic varieties of schizophrenia. The hypoglycemia is allowed to proceed for a short while after the Metrazol convulsion. This procedure was believed to combine the beneficial effects of both the Metrazol and insulin therapies. However, this thesis is by no means proved and the dangers of each procedure are obviously summated in combining the two. In our opinion, neither therapy has been conclusively studied, and the combining of these two procedures is premature, if not actually dangerous.

Similarities and Differences

The camphor-metrazol and insulin therapies, although devised independently, have certain features in common. In both are noted:

1.—*Signs of central-nervous-system irritation:* Diffuse fibrillary twitches; myoclonic spasms; tonic, tetanic, or torsion spasms; ankle, patellar, or mandibular clonus; positive signs of pyramidal tract irritation;

*We limit ourselves in the description of the insulin hypoglycemic procedure to the first monograph by Sakel, which concerns itself with the insulin procedure per se.

single or multiple major convulsive seizures; transitory monoplegic, hemiplegic, or quadriplegic manifestations; and many signs of internally excited vertiginous activity, as well as varied sensory disturbances—all transitory.

2.—*Provocation of autonomic-nervous-system responses:* Rapid fluctuations in pulse, blood pressure, and circulation; fluctuations in temperature; changes in the secretory and excretory functions of the alimentary tract; fluctuations in tone of the smooth musculature; ocular and pupillary changes; and rapid fluctuations of the respiratory rate, depth, and rhythm.

3.—*Alteration of the state of consciousness:* Clouding, dulling, and loss of consciousness.

4.—*Induction of changes in psychomotor activity:* Phases of both hypo-and hypermotility; stupor to violent, aggressive, destructive behavior.

5.—*Fluctuations of mood,* from mild euphoria to violent, frenzied agitation.

Whereas between the effects of insulin, camphor, and Metrazol, there are these significant similarities, it must likewise be recognized that there exist important differences. The maximum effect of an intravenous injection of Metrazol is almost instantaneously produced—certainly within one or two minutes. However, with the passing of this peak of influence, there is a gradual subsidence of its effect over a period of some hours. In contrast, the effect of insulin hypoglycemia increases slowly and progressively, not reaching its maximum effect for some four to six hours. With the administration of sugar, its influence is largely dispelled in about ten to thirty minutes. In the case of camphor, there is a gradually increasing effect, the peak of which is reached in from two to four hours, and which is dispelled slowly in another one to four hours.

The phenomena associated with such pharmacologic treatment of schizophrenia are extraordinary. It must certainly be evident that these therapies induce a remarkable amount of biologic change—physiologically and psychologically.

Physical and Psychic Effects

Among the physiologic changes, we note primarily stimulation and irritation of certain areas of the central nervous system. This irritation affects chiefly the medullary centers and basal ganglia, whence it radiates through the various cortical areas in an irregular fashion. In response to the diencephalic medullary irritation, there is a rather diffuse excitation of all branches of the autonomic nervous system, the most important effects of which are seen in the transitory but profound changes in the cardiovascular, respiratory, and metabolic functions.

In the psychic sphere, momentous changes in mental reactivity and social behavior often transpire in a dramatic manner. The psychologic phenomena associated with insulin therapy have been reported by Schattner[5] and Jelliffe[6]. A study of the behavior and mental reactions of patients treated with camphor and Metrazol is reported by Glueck and Ackerman[7].

With a Metrazol-induced convulsion, the patient undergoes, within a single day, or sometimes within several hours, an upheaval of personality of profound depth and content. In connection with such an extraordinary psychobiologic experience, it often appears as if, within a relatively short time, the entire scope of the patient's manifest personality functions has been altered. Seemingly, a previously dominant psychotic reaction is subordinated and the patient's behavior is so transformed as to make him appear once again a controlled social being, whose attitudes and reactions are measured by, and correctly oriented to, the outside world of reality. It has been amply demonstrated that these favorable transformations occur in many patients treated by these procedures, especially those who have been ill a short time and whose disturbances are acute. It is also true that these changes are often transitory, but their occurrence is nevertheless significant. The question of the intrinsic nature of this transformation is as yet an unanswered one. Careful research is needed to elucidate this problem. At the present early date, one can only speculate hypothetically in seeking an explanation of these phenomena.

We may regard healthy evolution of personality, including both physical and psychic aspects, as involving a progressive process of differentiation of functional reactions and capacities. We may conceive schizophrenic development, *per contra,* as an interference with the normal processes of psychosomatic growth and differentiation. This pathologic development is of such character as invokes a disorganization and destruction of certain areas of highly differentiated personality function. In our opinion the destructive process of schizophrenia is a partial one, never quite reaching its logical terminating point in complete destruction of the psyche which, in biological terms, signifies total death.

In this process of personality dissolution, there are strong simultaneous forces moving toward restriction of its destructive effects and preservation of the personality. These opposed biologic tendencies in the disease entity itself reach a state of stable equilibrium which blocks the impetus toward total destruction, but likewise impedes

movement toward complete recovery. Such a balanced equilibrium is eventually reached in the chronic schizophrenic state.

From such a perspective, it is possible to view the effects of Metrazol therapy as a radical disturbance of the equilibrium spontaneously reached in the schizophrenic process itself. The disturbance of this biologic equilibrium of the disease by means of an artificially induced convulsive seizure, momentarily carries the process of destruction on a profound physiologic and psychologic plane almost to death, but not quite. Most of our treated patients have directly inferred subjective experiences of death by dissolution and, upon recovery of consciousness, a sensation of gratification at being restored to life once again. It would seem, at least in psychologic terms, that the therapeutic convulsion signifies a fleeting propulsion of the patient back toward a quite primitive and relatively undifferentiated biologic state; perhaps it is not unwarranted to imagine that this tremendous artificial propulsion toward such a state brings with it the opposite tendency toward normal redifferentiation of the personality. Such a point of view would be in accord with the underlying hypothesis of the life and death instincts offered by Freud[8].

Close clinical observation of patients treated by camphor discloses a series of effects of a somewhat different nature. In these patients, frequently a great amount of anxiety is provoked, sometimes mounting rapidly to a point of panic. The patient often becomes more communicative and verbalizes his fears. Frequently, in this apprehensive state, he displays an energetic effort to solicit the help and protection of the surrounding people against the dire threats to his safety which he has imagined are immediately connected with the injection procedure. His contacts with people become more pliable; his verbal productions become more flexible; his delusions may become arborized, diffuse, unstable.

We may speculate that the camphor treatment tends to force a transformation of the chronic, relatively fixed schizophrenic state into one of acute schizophrenic disorganization, through the induction of a state of panic. It appears as if the camphor therapy exerts its influence in such a way as to make it impossible for the patient to perpetuate, in stable form, his schizophrenic defense patterns. It may be that, by depriving a patient of his opportunity to "heal himself" in the compromised direction of developing a chronic schizophrenic maladjustment; by taking away his schizophrenic defense mechanisms; and by forcing him into a state of continuous panic, he is afforded some chance to resynthesize his more normal personality structure. The nature of this process may be such as gives added impetus to the movement of the more normally preserved components of the personality in the direction of reintegration.

The effects of camphor just described apply chiefly to the period of drug influence either prior to the advent of, or after the convulsion. The influence of the camphor convulsion is similar to that of the Metrazol convulsion.

Summary

In summary, we offer the hypothesis that these pharmaco-irritative procedures tend to propel the patient's personality back in the direction of a primitive, relatively undifferentiated biologic state, perhaps remotely analogous to what must exist in the new-born or pre-born child. In so doing, there is provided a powerful and highly accentuated impetus to the movement of opposite forces toward redifferentiation of the personality. This process of redifferentiation may carry with it a stronger tendency back toward the normal than toward the pathologic. It may be that some such artificially propelled disturbance of equilibrium and some such interplay of antithetic forces as this, accounts for the restoration of some patients to a socially recovered state, with manifestly normal personality organization.

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Blythewood.

Cystoscopic Treatment of Nephritis*

Results in Two Cases

By J. H. SCHRUP, M.D., Dubuque, Iowa

THE FINAL and semi-final results in two cases of parenchymatous nephritis, one subacute and the other more chronic, both the outcome of cystoscopic and a few other urologic treatments, have now progressed so far that it seems important to report these to the profession without further delay.

Case Reports

Case 1.—A butcher, aged 40, for fifteen years had been exposed to much ice-box chilling. Gradually, during February of 1931, he became very weak and lost so much weight that he consulted a physician, who made a diagnosis of acute nephritis, giving the patient every sort of up-to-date and accepted treatment, including finally endocrine products in quantity. During this time the patient had some fever and slight edema of the eyelids and ankles.

Being very little improved by the end of May, 1931, this man came under my care. He then had a smoky, sometimes red urine, that contained 2 percent of albumin, 10 epithelial and other types of casts to a low-power field, and 30 leukocytes and 75 red blood cells to a high-power field. Some back pain and dysuria annoyed him, but no edema was present. The prostate and seminal vesicles were normal; the phenolsulphonephthalein excretion was 40 percent; the blood urea was twice the normal. Since he was more anemic, more dyspneic, and weaker than ever, the prognosis was bad.

Because there was little or no improvement after another month of treatment at my hands, I resorted to what seemed to me to be his only hope in treatment, although I could find nothing in the literature to support my judgment. However, I could see no harm in gently treating him the same as if he had a severe case of double pyelitis that was not amenable to medical treatment alone.

After some urethral preparation, to establish a good tolerance to the cystoscope, I gave him two bilateral kidney-pelvis lavages with a 1-percent solution of Mercurochrome, one week apart, using Nos. 4 and 6, French, ureteral catheters. I found that the cystoscopic treatments were fully as easily accomplished and as well tolerated as for any other urologic lesion. The urine specimens withdrawn from both kidney pelves were of the same character. Bacteriologic studies were considered unnecessary.

Symptomatically and objectively, the improvement was so great after these two cystoscopic treatments that it was felt that no more of them were required just then. Within six weeks, all of the pathologic ingredients in the urine were absent. The patient then considered himself normal, and he soon resumed more of his work than ever. Today he remains well, with no treatment from any source whatever during the past seven years.

Case 2:—A housewife, age 64, who had had the usual diseases of childhood, five uncomplicated confinements, an epigastric (gallstone?) history of thirty years' duration, and severe diabetes mellitus for the last five years previous to 1936, learned that her urine also contained much albumin, casts, and pus. Roentgenograms showed the left kidney somewhat enlarged, with its pelvis contracted. The blood urea was increased 25 percent; the blood sugar, 200 percent. Neuritis of the left thigh, leg and toes, and cardiac attacks were increasingly frequent during the past two years. She had lost so much weight and strength during the last six months that her death seemed near. This opinion was strengthened because of the efficient medical care she had had for many years, including bed confinement and insulin.

Everything medically current having failed to improve this woman's condition, direct kidney treatments for the nephritis were tried during the latter half of 1936. Bilateral catheters, to No. 12, French, with 1-percent Mercurochrome, and 1- and 2-percent solutions of silver nitrate were employed. One treatment every week or two almost completely cleared the urine of the nephritic elements by the end of that year. (Ten leukocytes to the high-power field persist, however, to the present time—June, 1938). The glycosuria could be only intermittently controlled by insulin and diet. Physically the patient gained so well during this period that only an extraordinary overactivity, in the early part of 1937, brought on gangrene of a toe of the left foot, requiring amputation.

In this gangrenous period the hyperglycemia at times ranged to 350 mg. per 100 cc.;

*Received for publication, June 24, 1938.

the hyperglycosuria to 5 percent and 1.040 specific gravity. Some acetonuria also was present. But during the six months required for the healing of the site of the amputated toe, there was no evidence of the past nephritis. Later, the insulin could be, and was, discontinued throughout the last half of 1937, because of the consistently lowered sugar findings in both the urine and blood. A moderately strict diet only was then maintained, and alone, without insulin, is relied upon at the present time.

During the first half of this year (1938) the monthly kidney pelvic lavages and ureteral dilatations (to a present size of a No. 14, French, catheter) have still further increased the improvement after each treatment.

Judging from the progress made in the two periods of cystoscopic treatments and in the intervening one of rest (healing of the gangrene), the prognosis may be assumed to be that probably another year (to the middle of 1939) of monthly cystoscopic treatments will be all that is necessary to perfect a more or less permanent recovery in this patient.

The phenolsulphonephthalein excretion, at the present time, is 60 percent, whereas it was only 20 percent before the first cystoscopic treatment. The blood urea has been normal during the present year. The latest (June, 1938) blood-sugar test stands at 138 mg. per 100 cc. (Normal, 90 to 120 mg.). During the past six months, the Benedict tests of the urine have shown only an occasional glycuresis, and the specific gravity remains at 1.012.

Comment

Direct treatment of almost all other intractable inflammatory conditions always seems logical, whether by incision, excision, or through the natural excretory and secretory passages of organs, glands, and sinuses. Therefore it seems reasonable to make a direct attack on inflammation of the kidneys through the innocuous way of the ureters. Nevertheless, up to the present time, it appears that these organs, easily accessible by the use of modern instruments, are seldom thought of as being approachable in this fashion, except for disorders other than nephritis. About the only surgical attack this disease ever had was decapsulation, which was practiced for a time some twenty-five years ago.

Conclusions

1.—All admit the great mortality and morbidity of nephritis; yet since the time of its description by Richard Bright, in 1827, there has been no apparent optimism concerning getting out of the rut of purely medical treatment, including every form of physical therapy.

2.—The two cases here reported offered no hope of even a temporary recovery by the usual medical manner of treating nephritis; but they both have practically permanently recovered under this new mode of treatment by means of cystoscopic lavage.

3.—There is no doubt in my mind that this method of direct treatment of the ureter and kidney for nephritis will be found beneficial in all forms of nephritis, whether acute, subacute, or chronic, the results varying with the type and amount of pathologic change present. I had some very satisfactory experiences with the chronic interstitial variety, with this line of treatment, before the time of my good results in these more acute forms.

4.—I cannot help but conclude that the reduction of the hyperglycemia and hyperglycosuria in Case 2 was the consequence (epiphenomenon) of the improvement in the patient's nephritis; but this, so far, remains an empiric question. The frequent association of nephritis and diabetes, and in her case, their almost coincidental subsidence after certain cystoscopic procedures, is interesting, and may be highly significant.

915 Main Street.

SCIENCE AND RELIGION

The purpose of science is to develop, without prejudice or preconception of any kind, a knowledge of the facts, the laws, and the processes of nature. The even more important task of religion, on the other hand, is to develop the consciences, the ideals, and the aspirations of mankind. Each of these two activities represents a deep and vital function of the soul of man, and both are necessary for the life, the progress, and the happiness of the human race.—PROFESSOR R. A. MILLIKAN, in "Physician, Pastor and Patient."

Treatment of Pyogenic Infections*

(Report of 313 Cases in the Chicago State Hospital)

By FREDERICK A. CAUSEY, M.D., F.A.C.P., Lincoln, Ill.

Managing Officer, Lincoln State School and Colony

THE INCIDENCE of pyogenic infections among the insane is a matter of common knowledge and some concern to those engaged in their care and treatment. That some methods of treatment are more satisfactory than others, will hardly be questioned. It is likely that each of us has found a routine that is most practical in our own experience and, therefore, utilized to the exclusion of others that are equally satisfactory in some one else's hands.

In this communication I do not propose to offer my entire regimen, but to suggest an accessory measure which, combined with other standard therapy, will, I believe, serve to decrease morbidity and hospitalization. It is polyvalent antigen†, consisting of a deproteinized flocculus obtained by fractionation from an extract of beef muscle and normal horse serum, which is suspended in 0.5-percent phenolized physiologic saline solution. Judged by the biuret test, it contains no protein at all, but by microchemical testing methods 0.02 percent of protein is found, compared with 0.63 percent in normal serum. Such an infinitesimal protein content takes this agent out of the group of nonspecific protein remedies. It is of value in controlling many acute and chronic local infections, and in systemic infections and infectious diseases that are caused by the endotoxic type of bacteria.

It is not claimed that this agent is, itself, the actual immunizing substance. Although it may supply a certain amount of true antibody, its chief action is to stimulate the production of "natural" antibodies. For this reason, it can be employed with advantage in a wide range of infections. The polyvalent nature of this antigen is, perhaps, its most outstanding asset. However, only one claim is made for it; namely, that it arouses the defenses and is thus active in all infections caused by the endotoxic bacteria (those which retain within themselves the larger part of their waste products or toxic substances). This group of organisms is responsible for 75 percent of all bacterial diseases.

Since it is non-toxic, no detrimental reactions, like those produced by injections of milk, broth, or killed cultures of various microorganisms, follow the use of the method under consideration. Its subcutaneous or intramuscular (*not* intravenous) injection does not give rise to shock reactions. Even to an infant, sufficient doses may be given to insure the maximum advantage from increased antibody production, without fear of adding to the patient's difficulties.

During the fiscal year from July 1, 1935, to July 1, 1936, there were admitted to our hospital wards at Chicago State Hospital, 1,242 cases of acute infection. During the first six months of this time I noted a prolonged period of hospitalization. Because of inadequate facilities, we were eager to reduce this period to a minimum, so that hospital congestion could be relieved and patients returned to their respective wards. With the institution of this new antigenic measure there was a marked shortening of average hospital residence and the hospital population was reduced in a most gratifying manner. As a check upon other possible factors in this improvement we returned to our former therapy (without this antibacterial measure) for a few months, and the period of average hospital stay was again prolonged.

A few case reports will illustrate our methods and results.

Case Reports

Case 1:—C. H., a farm hand of seventeen years, came to my office with five large furuncles, each the size of a half-dollar, in various stages of development. All the lesions had been poulticed with crushed plantain leaves—one of the many sources of socalled astringent action prescribed by the laity. These boils were very painful, and the lad was miserable. His urine was sugar-free.

I injected 0.5 cc. of the antigen subcutaneously, purposely limiting the amount in case unfavorable symptoms should arise. I saw him three days later, when the furuncles were much less painful, and, in those that were draining, the character of the discharge had changed. They looked less inflamed, so I gave a second injection of 1 cc. (Parenthetically, let me say that I have doubled, tripled, and even quadrupled this dose, with much prompter relief of symptoms.) The lesions that "pointed" were evacuated and the pustules that had been poulticed, compressed, and otherwise maltreated, cleared up on the establishment of this procedure. The patient lost no time from work after his first visit.

*Read before the Logan County (Ill.) Medical Society, November 12, 1936.

†Edwenil, Spicer and Company, Glendale, Calif.

Case 2:—A young man, 26 years old, had spent two years at a reputable sanatorium to "get the cure," but was sent home to die of pulmonary tuberculosis. He had been confined to bed for months, and I called to attend him one night after a frank hemorrhage. He expectorated quantities of tenacious, nummular sputum, loaded with tubercle bacilli, ran an afternoon temperature, and had night sweats—in short, he was "licked" and he knew it. His father told me that he thought he might recover if he could raise the sputum more easily. Examination disclosed a collapsed lung on the left side, with fluid in the pleural cavity.

While the manufacturers do not recommend this product as a remedy for tuberculosis, it has been found useful in controlling the secondary infections which so often complicate this disease, so I decided to try it. After the third weekly dose, the patient said he felt better; the temperature curve was almost normal; quantities of pus-laden sputum was expectorated with far less effort; and both his appetite and weight were increased.

After a few weeks the patient was able to come to my office for treatment. He lived out of doors until he took on a healthy tan. As his strength increased, he assumed some light chores. The effusion cleared up and he was again hopeful.

Case 3:—A child (T. B.) presented a hand lesion discharging foul-smelling pus. The laceration was caused by a cap-pistol injury. The first injection was given while the little patient slept in his mother's arms, and subsequent injections caused no distress. The wound healed completely and with unusual rapidity.

Case 4: Two little girls in separate homes (B. S. and F. S.) were prostrated by "heavy colds," which were in reality broncho-pneumonia. F. S. was found panting for breath, with an ice-cold onion poultice on her chest. Her fever was high. Antipyretics and repeated doses of the antibacterial agent used in this series, effected a rapid recovery. B. S. was brought to my office in delirium. I injected 1 cc. of the antigen into her leg, and when I saw her a half-hour later, her mother announced, "She is much better, Doctor," and the little patient was asleep. Another dose was given the next day. The child was well before the week-end.

CHART I.

The Effect of Edwenil on 313 Hospital Cases

Infection	Cases	Avg. Total Amt. Edwenil in cc.	Percentage of Recoveries or Improvements 10 20 30 40 50 60 70 80 90
Pneumonia, Lobar	5	6.4	
Pneumonia, Broncho	5	9.4	
Pneumonia, T.B.	3	6.6	
Influenza	8	2.6	
Infl. with Otitis Med.	3	4.1	
Upper Resp. Infections	46	1.7	
Upper Resp. Inf. with O.M.	2	3.0	
Bronchitis, Acute	16	4.2	
Bronchitis, Chronic	1	10.0	
Sinusitis, Acute	20	3.4	
Sinusitis, Chronic	28	7.1	
Furunculosis	14	4.8	
Ext. Inf. (feet, hands, scalp)	43	5.9	
Abscess	18	6.9	
Otitis Media	7	7.2	
Otitis Externa	1	1.0	
Arthritis	11	5.2	
Tuberculosis	3	7.4	
Osteomyelitis	6	5.3	
G.C. Urethritis	3	6.5	
G.C.	1	10.0	
Erysipelas	12	4.4	
Various other Dermatoses	8	6.0	
General Paresis	7	10.1	
Miscellaneous	42	5.8	

Case 5:—Four sisters (C, M, S and G), were subject to frequent upper respiratory infections. Due mainly to economic conditions, they were undernourished, anemic and lacked resistance. They all contracted influenza, and in each the disease began with a sore throat, and the infection gradually extended to the nose, sinuses, middle ear, and chest. The strongest girl developed pneumonia; two younger sisters had otitis media with copious discharge, which changed from a thick creamy to serum consistency under the antibody-stimulating therapy. One of these recovered and gained in weight. The infection in the fourth sister did not proceed beyond the "sore throat" stage.

Comments and Conclusions

Of more than 300 cases in which I have used Edwenil, 54 percent have recovered; 35 percent showed improvement; 6.3 percent were unimproved; and in 4.7 percent deaths occurred. Results in different infections are shown in the accompanying Chart I. The miscellaneous cases include a variety of conditions for which Edwenil was used experi-

mentally or to control an underlying or concomitant infection. I have chosen to indicate the average total dosage used in one case, since this gives at once an idea of the duration of treatment, as well as the dosage.

My clinical observations lead me to the following conclusions, which have been substantiated by the experience of other workers:

1.—Acute, uncomplicated infections respond more rapidly to this antigen than do chronic infections. The fairly large sinusitis series illustrates this aptly.

2.—Edwenil stimulates increased antibody production, and this is almost invariably reflected in clinical improvement, although it may not be sufficient in all cases to overcome the infection. The deaths in my series are attributable to overwhelming infections in elderly and often uncooperative patients, or to lesions aside from the infection for which treatment was being given. In the light of additional experience with this antibacterial agent, I am confident that many unimproved cases would have responded to larger doses.

3.—Edwenil is contraindicated in any closed infection. With drainage established, large doses are well tolerated and effective.

4.—The conditions that respond to this antibody stimulant are quite varied, but it will be found that all have one underlying etiologic factor—an endotoxic bacterial invasion.

Anal, Rectal, and Sigmoidal Prolapse and Procidentia*

A Suggested Classification

By HARRY E. BACON, M.D., F.A.C.S., Philadelphia, Pa.
and THEODORE F. REUTHER, M.D., Effingham, Ill.

THE IMPORTANCE of a clear terminology, not only lucid but definite, in medical parlance cannot be overestimated. Definitions or a nomenclature that permit of individual interpretations, or even divergent comprehension by different groups or in various textbooks, are snares to the feet of progress. The student, to whom ideas must be presented and explanations made as clearly as possible; the practitioner, who must exchange ideas with his colleagues; the specialist, who must grasp quickly and at a single hearing the details of hitherto uncontacted cases, all appreciate the value, the necessity, of terms that mean the same thing, whether they are found in Brown's Texts or in Green's Series.

In my particular field, I have long deplored the lack of uniformity, both in teaching and in practice, in the use of the terms, "first, second, and third degree," as applied to prolapse and procidentia. These descriptions are interpreted one way by some groups, and exactly the opposite by others.

Hitherto, the various suggested classifications have differentiated either between the number of rectal coats involved or the portion of intestine affected, but none has included both these factors, based on the pathologic conditions actually present.

Kelsey was the first to distinguish between prolapse of the mucous membrane alone and the descent of the other layers.

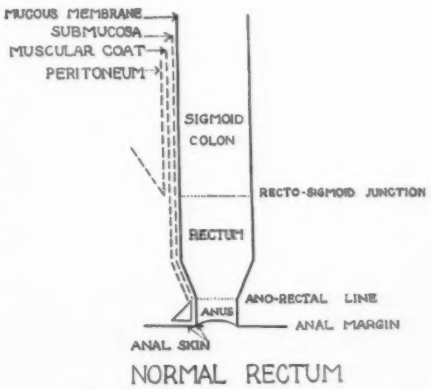

Fig. 1:—Diagram of anus, rectum, and sigmoid colon, showing various walls of the bowel.

Cooper and Edwards adopted this distinction and applied the terms "complete" and "incomplete," respectively. Allingham so restricted his definition as to accomplish

little. He defined prolapse as the descent of the mucous membrane in part of its circumference, and procidentia as the descent of the entire circumference of the rectum.

an impossibility, since the anus has but one coat. Procidentia of the rectum is *rectal procidentia;* external if it protrudes through the anus; internal if it does not.

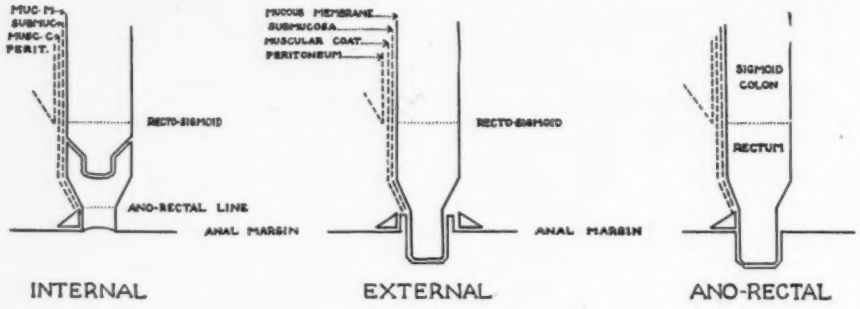

Fig. 2:—Diagram showing varieties of prolapse.

The first attempt at a two-way classification was that of Tuttle. He defined prolapse as any form or degree of descent, and procidentia as any degree of complete descent, and subdivided the latter into first, second, and third degree, according to whether the prolapse begins at the anus, above the anus, or well into the rectum. The advance here is obvious, but the confusion is equally obvious, or became so as time went on.

C. F. Martin improved on Tuttle's work, in the longest stride that had been taken up to that time. He described prolapse as the descent of the mucosa only, and procidentia as the descent of the three coats of the bowel; he discarded the indefinite first, second, and third degree, and substituted the terminology of the anatomic parts involved —anal, anorectal, rectal, etc. But there is yet another phase of the pathosis that must be included: Does the prolapse or procidentia protrude through the anal aperture? Here is added the term "internal" or "external," according to whether or not the prolapse or procidentia is visible outside the anal orifice.

To sum up and present a definition based on anatomy and so termed as to indicate all the essential pathologic conditions: *Prolapse* is the downward displacement, or abnormal descent, of the *mucous membrane,* (see Fig. 2), and is qualified according to the structures involved. Eversion of the lumen of the anal canal is *anal prolapse;* prolapse of the mucous membrane into the lumen of the rectum is *rectal prolapse;* external if it protrudes through the anal opening; internal if it does not. *Procidentia* is the downward displacement, or abnormal descent, of *all the coats* of the rectum or sigmoid (see Fig. 3). Anal procidentia is

Invagination of the sigmoid, with the peritoneal coat (intussusception), is *sigmoidal procidentia,* which may be internal or (rarely) external.

In brief, *the symptoms are chiefly a mucous discharge, bleeding, and a dull, dragging pain,* which becomes agonizing if strangulation occurs.

Frequently the displaced mucous membrane may be observed as an abnormal looseness of the folds of the rectum, with or without apparent pathologic change. At times the redundant mucosa may obstruct the passage of the proctoscope. A portion or the entire circumference of the bowel may be involved. Its appearance in bright-red and glistening, and any slight trauma will produce bleeding. This variety of descent will be noted digitally by its relatively soft but firm consistency. It corresponds to a double layer of mucous membrane, which may be moved sidewise or pushed upward. In all cases the examining finger can be inserted between the prolapse and the intact wall. This is *internal rectal prolapse.* Should this protruding rectal mucosa extend outside the anal aperture, in which case it is characterized by its spherical shape and by the longitudinal furrows radiating from the center of the anal canal, it is *external rectal prolapse.*

In some cases, the modified skin lining the anal canal becomes everted, so that it is directly continuous with the perianal skin, with no sulcus between. This is diagnosed as anal prolapse or *anal eversion.* When associated with prolapse of the rectal mucosa, it is *anorectal prolapse.*

External procidentia is diagnosed by inspection of the protruding mass, which is

characterized by a series of circumferential folds irregularly placed. It is larger and protrudes farther than prolapse. It is thick and firm to the touch, and between the procidentia and the intact wall there is a sulcus, unless prolapse of the anal skin is associated. In chronic cases the sphincter muscle is atonic.

Internal procidentia is characterized by actual strangulation occur, but when it does, the prolapse may become gangrenous and turn black. In chronic cases the sphincter is atonic because of the constant descent and replacement of the procidentia, and the mass itself is pale and leathery in appearance, and, because of its increasing thickness and hypertrophy, traumatism may occur, resulting in erosion and ulceration.

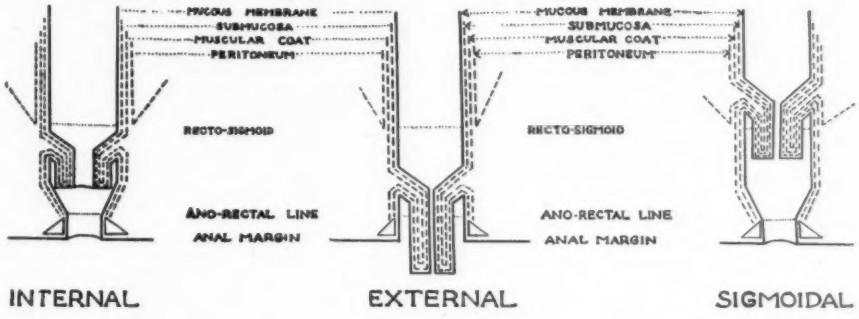

Fig. 3:—Diagram showing varieties of procidentia.

the increased thickness and firm consistency of the displaced coats. The mass is movable with the finger, but so obstructs the proctoscope that digital examination is more valuable than instrumental. The finger can be easily inserted in the sulcus between the procidentia and the intact wall. When the procidentia involves the sigmoid colon, with its peritoneal layer, the diagnosis is that of *internal sigmoidal procidentia.* So rarely does this last named lesion become external, that it frequently remains undiagnosed unless conditions are such as to warrant digital and proctoscopic examination. Should it happen, however, that an internal sigmoidal procidentia protrudes through the anal aperture, it would be properly diagnosed as *external sigmoidal procidentia.*

The mucosa of an internal prolapse is brilliant red in hue, with a moist, glistening surface. As it progresses and becomes external, the surface may be observed to carry a thick and viscid covering of mucous exudate. If it remains protruding through the anal opening for any length of time, it becomes, in part, strangulated by the sphincter muscle, and is therefore edematous and dark-red in color. Rarely does

Like prolapse, the mucosa covering an internal procidentia is bright-red in appearance, but becomes darker in hue as the condition persists. Internal procidentia is distinguished from prolapse by the presence of the musculature in the mass. In internal sigmoidal procidentia the sulcus occurs in the region of the rectosigmoid junction. Externally the procidentia has much the appearance of prolapse and undergoes the same changes. Differentially, *protrusion of more than two and a half inches beyond the anal orifice usually contains the peritoneal coat.* Should erosion or ulceration occur, there is a mucopurulent and fetid discharge. On section, varying degrees of looseness are noted between the mucous membrane and the submucosa, and more markedly between the submucosa and the muscular coat. The latter is somewhat hypertrophied.

Summary: A simple re-classification has been offered which, it is felt, will prove of value in teaching graduate and undergraduate students, and in determining the proper means of therapy.

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ABSENCE

Absence lessens small possessions, but augments great ones, as the wind extinguishes the taper, but increases the flame of a burning dwelling.—LA ROCHE FOUCAULD.

The Pathologic Gallbladder

Views on Diagnosis and Treatment

By I. S. TROSTLER, M.D., F.A.C.R., F.A.C.P., Chicago

GALLBLADDER disease is by far the most frequent pathosis in the upper abdominal region, and is probably the most often overlooked by physicians. Approximately 50 percent of all persons over 35 years of age have gallbladder disease, and about half of these have stones in the gallbladder. These figures may seem large at first glance, but autopsies and operative findings, made during the past ten years, verify them.

Recognition of the milder inflammations of the gallbladder is not a simple matter. It involves the taking of a history in a careful and minute manner, a complete and careful physical examination, proper cholecystography, and often microscopic and chemical examinations. Of course in the "dead open and shut" cases, the diagnosis may be easy; but in the more obscure ones, all of the various methods of study may be necessary before a correct diagnosis is arrived at, and when that is finally established the problem is solved and the best way to handle the case presents itself.

The *history*, in a characteristic case, is one of pain radiating to the right shoulder, flatulence, belching, indigestion which is most marked after eating rich or fatty foods, etc. Occasionally the flatulence occurs after eating even small amounts of easily-digested foods, or even the ingestion of water. In fact, I have come to consider that complaints of flatulence are the most frequent of any of the items to be found in the history. In looking over the histories of 100 cases of proved cholecystitis, 47 of which had stones, 99 of them complained of flatulence, or, as many patients described it, "bloating." I therefore place flatulence as the most common complaint of the patients.

Of course pain, in the form of biliary colic, is readily recognized, but even gallbladder pain is protean, assumes numerous and various forms, and is frequently not characteristic. Some patients have pain in relation with their meals; many say that the pain bears no relation to eating; and quite a decided number have so little pain that they do not know its character, even though they recognize that they do have pain.

If jaundice is present or has occurred after an acute attack, the diagnosis is usually easy, but so many people do not know what jaundice is and allege sallowness to be jaundice and vice versa that, unless the examiner sees the icterus himself, this point is not worth so much in a history.

A carefully made *physical examination* is of utmost importance and should never be omitted in the milder or doubtful cases.

Simple inspection will sometimes tell much if the patient is thin and spare. In more than a few instances I have been able to diagnose the exact location of the gallbladder by having a thin patient lie with a small firm pillow or sand bag under the lower dorsal region. And when this is seen, very slight palpatory pressure will elicit tenderness if the gallbladder is diseased. This was demonstrated to me by a small-town country Doctor some thirty years ago, and has been found useful when examining thin patients.

Tenderness over the gallbladder is characteristic, but it is of paramount importance to know where the gallbladder is located before we say that there is gallbladder tenderness. I have, for many years advocated that, when gallbladder disease is suspected, the physical examination be made after the roentgen-ray examination, and whenever possible a fluoroscopic examination with palpation is made. I have found more unsuspected diseased gallbladders during gastro-intestinal fluoroscopy than by any other single means. Having visualized the duodenum and marked the first portion of it by a touch of Mercurochrome, it is usually very easy to palpate the gallbladder and to *know that you are palpating the gallbladder.*

Frequently tenderness of the gallbladder is accompanied by tenseness or a tendency toward rigidity of the upper part of the right rectus muscle. This is always a strongly confirmatory finding and, in my experience, was sufficient to differentiate between a gallbladder disease and appendix disease in several cases where the lower part of the right rectus was lax and flaccid, while the upper part was tense, and no definitive tenderness could be elicited because the patients had a low pain sense.

Special Technics

The roentgenologic diagnosis is unquestionably the most accurate, important, and valuable single diagnostic measure in gallbladder diagnosis. This is because cholecystography permits the visualization of the shadow cast by the gallbladder and its

contents, showing its position, ability to concentrate the bile, ability to contract and empty itself, the presence of adhesions, distortions, deformity, size, and usually the presence or absence of stones, even when these are of lighter density than the dye-impregnated bile. The importance of this information cannot be questioned or doubted in any case. I have, a very few times, made tentative diagnoses of intrahepatic gallbladders, which were verified, and which would almost certainly have been the source of considerable surgical indecision and conjecture, had I not indicated the likelihood of such a probable anomaly.

The technic of the roentgenologic examination of the gallbladder has become so well established that little chance for error remains, and while nearly every roentgenologist of experience has some favorite modification of the technic that he favors and uses, excellent roentgenograms are the rule rather than the exception. Consequently, if the roentgenologist or whoever undertakes to interpret the films has the necessary knowledge, the correctness of the diagnosis shows a very high percentage. The interpretation of the roentgenographic findings should be undertaken only by those amply equipped by long experience and adequate training, accompanied by a complete knowledge of the technic employed. So equipped and applied, cholecystography should yield nearly 99 percent of correct diagnoses.

Chemical and microscopic examination of the bile, if needed or desired, is best accomplished by the use of the Rehfuss duodenal tube, and frequently information so obtained proves to be valuable. Rehfuss stresses the importance of the color sequence which follows immediately after the introduction of the duodenal stimulant. He says that failure to secure the proper sequence of colors indicates disease or obstruction. Numerous stimulating solutions are employed, among which magnesium sulphate, dilute hydrochloric acid, and peptone solutions are probably the best known and most popular. Rehfuss claims, and from my own limited experience I believe, that plain olive oil is the best and most reliable.

The position of the tube is best ascertained by fluoroscopy, although the character of the fluid aspirated is a fairly sure and clear indicator. Failure to secure concentrated gallbladder bile, after introducing the stimulant, is considered a definite indication of either blockage of the cystic duct, adhesive bands, stone, etc., or of a mucosa so diseased that concentration of the bile is impossible.

If the Rehfuss tube is used, microscopic examination as to whether cholestrol and bilirubin-calcium crystals are present is of considerable value and importance. The finding of cell debris, bacteria, pus cells, parasites, etc. is significant.

The Rehfuss tube should never be used if acute inflammation of the gallbladder is present or suspected, or if stones are suspected. Another contraindication to the use of this procedure is cardiovascular disease of any seriousness.

While my specialty is radiology, those who know me best know that I try to keep abreast of the times in all branches of medicine; in fact I have to do that because radiology has ramifications into every other branch of medicine. Because of this, I am frequently asked to advise regarding the treatment or the handling of gallbladder patients.

Treatment

I have always been firm in the belief, and know of no good reason to vary that opinion, that, if a gallbladder contains stones, there is no way to cure or even palliatively relieve the patient except by operation. I believe that that is one hard and fast rule and I never vary from it. I believe that a person with stones in his gallbladder, who is suffering from that gallbladder, should be operated upon if the danger from the operation is no greater than 1 to 1 of recovery. With our modern anesthesia, both general and local, I believe no one should suffer if they want and can secure relief.

In the pathologic gallbladder cases where no stones are found by any of the usual diagnostic measures, I am in the habit of suggesting that medical management be given a trial, if the patient is controllable and the attending physician cares to undertake a more or less long and rigorous handling of the case. This is particularly true of the cases where there is an appreciable degree of cardiovascular or renal disease. If the hepatic function is poor, the blood pressure subnormal or high, or if any of the long list of conditions which tend to make the patient a poor surgical risk is present, medical and regimenal management are, of course, recommended. Under these conditions I believe that an effort should be made to teach the patient how best to live with his or her gallbladder, by following certain dietary rules, living regularly, securing regular elimination, etc. Here some of the so-called bile salt preparations may be beneficial.

If a gallbladder patient has apparently a high degree of resistance and wants to be cured quickly, surgery is the method to be followed, and in my experience, covering about thirty-five years, I know of no instance where cholecystectomy was done

in which the patient had a recurrence of real symptoms referrable to the gallbladder. Of course the occurrence of stones within the liver may cause trouble, but this cannot by any reasoning be blamed to the gallbladder. In a very few instances I have suspected the occurrence of what Daniel Eisendrath showed to occur in dogs, some years ago—the dilatation and hypertrophy of the stump of the cystic duct, so as to form a sizable ampulla, but in no instance of this group where patients were reoperated, did this occur.

I do not believe in draining gallbladders and never recommend it. I know of a number of patients who have had drainage operations, who had to undergo cholecystectomy later, and who afterward became well and symptom-free.

This subject is one of the important ones in medicine, and while I do not pretend to have exhausted it nor to have contributed anything new regarding it, if I have pointed out one or two salient points I will be satisfied with this brief discussion of the pathologic gallbladder.

25 E. Washington St.

Occult Cerebral Hemorrhage of Traumatic Origin

(A Case Report)

By ROY S. HUBBS, M.D., Sheridan, Wyo.

TRAUMATIC cerebral hemorrhage of the type accompanied by visible signs of external injury, immediate or rapidly appearing loss of consciousness, and followed by the usual signs of increased intracranial pressure, is fairly common and usually does not cause much difficulty in diagnosis. There is much more difficulty in diagnosing those intracranial hemorrhages which follow minor, almost unnoted head injuries, and which sometimes do not produce symptoms until hours or even days after the injury.

In his text, "The Diagnosis of Nervous Diseases," Purves Stewart describes what is called, "delayed traumatic apoplexy or ingravescent subdural hematoma", discussing a frequently bilateral condition in which an accumulation of blood gradually develops between the dura mater and the cerebral hemispheres, in the subdural lymph space. In this type, there is said to be usually a long interval (several days or more), before symptoms of increased intracranial pressure appear.

Medical literature, practical experience, and common application of knowledge of the complexity and delicacy of structure of the central nervous system, together with a study of the effects of trauma upon the vascular system, indicate that there are probably other forms of hemorrhage of traumatic origin with late-developing symptoms, some of which may be entirely unrecognized. In some cases in which hemorrhage is definitely known to be present, it appears that the exact location and extent of that hemorrhage cannot be determined by ordinary physical means. An illustration of this type is given herewith.

Case Report

On April 12, I was called to see a white male of 32 years, who, according to his relatives, had "suddenly lost his mind." The immediate history revealed the fact that, 48 hours earlier, the patient had come home from his work, tired and complaining of headache, but perfectly rational. He lay down on the davenport, fell asleep at 6:00 P. M., awakened at 10:00 P. M. complaining loudly of head pain, appeared to be entirely out of contact with his environment, and did not recognize his own wife and children. A general practitioner was called, who administered a hypodermic injection of morphine, with little quieting effect on the patient. The next day his condition was unimproved, and on the second day following the onset, when I first saw him, he was still talking irrationally and was out of contact, holding his hands to his head as though in pain.

A physical examination revealed the following positive findings: Engorged retinal vessels; hyperemic retinae; blood pressure, 144/90; and slightly hyperactive knee and ankle jerks. Because of the evidence of increased pressure, and as a diagnostic pro-

cedure, 8 cc. of spinal fluid were slowly withdrawn by lumbar puncture. The fluid showed a distinctly reddish tinge and microscopic examination showed many normal red blood cells. Wassermann and Kahn tests were both negative on this fluid and on the blood. No history of trauma could be obtained at that time, and no sign of external injury was present.

The patient was given sedatives, in the form of Nembutal and Sodium Ortal, an ice cap was used at his head, and instructions were given to keep him as quiet as possible. The next day there was no change, but on the second day thereafter (April 16) the retinal engorgement again was prominent and another small drainage of spinal fluid was performed. This and subsequent drainages showed a gradually lessening residuum of red blood cells and blood pigment.

The patient remained out of contact with his environment for two weeks; then his mind gradually grew clearer, and on May 10, thirty days after the onset of symptoms, he remembered being hit on the head by a sack of drug supplies at approximately 1:00 P. M. on the day the symptoms first appeared. He had not been rendered unconscious by the blow, but had been slightly dazed and staggered a little when first hit. He resumed his work almost immediately. He said, and produced witnesses to prove, that he had complained of headache about an hour after being hit, and had gone out of doors about 3:00 P. M. because of feeling so ill, but shortly thereafter returned to his work. He had a severe headache the rest of the afternoon, but essentially no other symptoms.

During the latter half of May, the patient improved rapidly, went back to his work on June 1, and is entirely normal now, with the exception of rather frequent severe headaches in the left occipital region.

The mental symptoms and the presence of blood in the spinal fluid in uniform distribution, together with the subsequent presence of disintegrating red blood cells and of xanthochromia in that fluid, seem very definitely to prove that the hemorrhage was intracranial. Attempts to localize the lesion by x-rays and percussion were fruitless, and there were no definite focal symptoms to assist in localizing the hemorrhage. The absence of indications of external injury and the comparatively late onset of symptoms, make the case a rather unusual one, and the non-appearance of localizing symptoms has thus far served to put the case in the list of incompletely diagnosed cases. Nevertheless, the appearance of acute symptoms on the same day the trauma occurred, with intense headaches ensuing shortly after the injury, indicates that the origin was probably traumatic, even though one must admit the possibility of the presence of a weakened capillary or vessel serving as an indirect cause of the hemorrhage.

LAUGHTER

Laughter is the saving emotion of the human race, when genuine, for from its presence the cynic flees, the pessimist retreats, the misanthrope is driven to cover. Under its influence the sun shines in dark places, the birds bring again their choicest songs, the flowers lift their smiling faces, and the world becomes once more a worthwhile place in which to live.—CHARLES E. WHEELAN.

GOOD LIVING

Do the thing circumstances have led you to do to pay your bills, and the thing you most dearly love to do, to supplement, re-enforce, and enrich your work. Interrelate all the elements of your life to enable you to be of the highest possible service to your fellowmen. Compete only with yourself and thank God for such an opportunity for growth.—Bulletin, F. P. R. S.

GOODNESS AND BEAUTY

It is a happiness to find, amid the falsehoods and griefs of the human race, a soul at intervals born to behold and create only beauty. In proportion as man rises above the servitude to wealth and a pursuit of mean pleasures, he perceives that what is most real is most beautiful, and that, by contemplation of such objects, he is taught, elevated and exalted. This truth, that perfect goodness and perfect beauty are one, is made known to the artist.—EMERSON.

Physical and Office Therapy and Radiology

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The Tripod of Healing

THE ALTERATIONS of the structure or functions of the human body, which we call disease, can, as a rule, if they have not advanced too far and too fast, be restored to normal by purely natural forces, unaided by medical art and science. These spontaneous recoveries, however, require so much time and such heavy expenditures of the patient's energy that dependence upon them seems as foolish as walking from New York to Chicago (a perfectly possible feat), when trains—and now airplanes—are running every day.

Sometimes an organ or tissue becomes so seriously or extensively altered that its restoration is impossible; and it may even endanger other structures. In such conditions, *surgery* exercises its proper function by mechanically correcting or removing the damaged or dangerous part.

So long as anatomic or functional restitution is possible, it may be accomplished by means of *drugs* or by *physical measures*—sometimes one; sometimes the other; often both together.

The body's various activities are under the control of the central and autonomic nervous systems, frequently through the medium of the ductless glands. Some drugs act upon the various divisions of the nervous system, producing increase or diminution of certain glandular secretions; stimulation or dilatation of certain blood vessels; and many other changes.

Physical measures will, in many instances, accomplish the same purposes, if applied with equal intelligence and judgment. Drugs will do certain things which physical agencies will not do; and the converse is also true. Sometimes the successful application of one or both of these methods depends upon preliminary surgical intervention.

Before a man is legally permitted to apply drugs or surgery in the treatment of disease he must secure the degree of Doctor of Medicine and convince the officials of some state of his ability to carry on such practice with safety to the community. During his time of preparation he must study anatomy, physiology, pathology, bacteriology, materia medica and therapeutics, and a score or more of other fundamental scientific subjects.

Before the embryo surgeon goes into the operating room, he must have a sound knowledge of the structures he is about to cut and handle, and of the way they behave, in health and disease; otherwise his ignorance might result in incalculable damage to his patient. He must also know what instruments are available for the work in hand, how they are constructed and what they will do.

Before the budding internist or practitioner is permitted to write a prescription for drugs, he must be reasonably familiar with their pharmacologic effects—the changes in body functions produced by their administration; how they act when given in overdoses and the most prompt and effective means for combating undesired effects; and the best way and time to give them so as to produce the maximum of therapeutic effect in the minimum of time.

Physical agencies are powerful remedies in the treatment of disease, and many of them are applied by complicated and potent apparatus. Some of them may produce unpleasant or even dangerous results, if used unintelligently. Is it asking too much to require that the physical therapist shall know as much about anatomy and, especially, physiology, as the surgeon or internist knows; and sufficient of electricity and other branches of physics to understand the workings of the machinery to whose influence his patients are being subjected?

Why would not a course of lectures and a textbook or two on the pharmacology, toxicology, and therapeutics of physical agencies be enormously helpful to those who purpose to use them or are using them? How many physical therapists are as familiar with the indications for and limitations of light, heat, baths of various kinds, massage, vibration, etc., as a physician is (or should be) with those for calomel, digitalis, strychnine, insulin, quinine and many other drugs?

If non-medical healers and incompletely educated technicians are permitted to administer physical remedies (except, of course, under the direction and instruction of a *qualified* physician—which does not, just now, mean *all* physicians), the results are almost certain to be as unsatisfactory as would those of the promiscuous and irresponsible giving of drugs by persons who knew little or nothing of their nature and effects.

Only when physical therapy is placed upon the same sort of basis as that upon which surgery and drug therapy are founded, and prescribed or administered by men who thoroughly know the human body and the agencies and apparatus they are using, will these newest factors in the amelioration and cure of disease be in a position where they can be honestly placed where they of right belong —by the side of medicine and surgery, as the third leg of the tripod of healing.

G. B. L.

Is Cancer Treatment Worth While?

PERCY FURNIVALL, surgeon to the London Hospital, writes very interestingly in the *British Medical Journal* of February 26, 1938, on the patient's aspect of modern cancer therapy.

He discovered a small carcinoma on a posterior pillar of the throat and began treatment at once, under the supervision of a New York surgeon who has had wide experience in the treatment of cancer. Deep radiation therapy, with roentgen rays, and insertion of radon seeds were carried out. From the scientific point of view, excellent results were obtained.

From the patient's standpoint, he feels that it all was not worth while. For many months, he has been so weak that he has been unable to get out of the house and garden, or to walk more than a few yards. He has been suffering from pain in the side of the face ("I would not wish my worst enemy the prolonged hell I have been through with radium neuritis and myalgia for over six months"), dysphagia due to ulceration occurring at the site of the carcinoma, anorexia, and weakness.

"It is interesting, but not amusing, to watch one's heavily irradiated tissues, practically unchanging month after month, wondering whether they will recover or die; knowing that the only thing that one can do is to keep the mouth clean and the general health and nutrition as good as possible. Formerly, I could play a daily round of eighteen holes of golf; now I am a bent and feeble old man."

He now makes a plea for more consideration of all factors involved before submitting a patient to irradiation which may prevent him from enjoying life for a long time or working for an indefinite period. He feels that he would have been better off if the growth had been removed surgically, even though there was greater possibility of recurrence.

La Rochefoucauld has well said, "It is a grievous illness to preserve one's health by a regimen too strict."

R.L.G.

When the archer misses the center of the target, he turns around and seeks for the cause of his failure within himself.—KONG FU TSZE (B. C., 551).

★ Notes and Abstracts ★

Clinical Aspects of Short-Wave Therapy

CIRCULATORY DISEASES are often favorably influenced by weak doses of short-wave therapy. While, on the one hand, in angina pectoris, proper doses often soon put an end to attacks, on the other hand improper doses may often produce the severest attacks.

The effect on the blood vessels obviously depends on dilatation of the capillaries. According to Cignolini, this dilatation sets in only after a certain dose, for if this is too strong a contraction occurs—the exact opposite to what is wanted.

According to the latest investigations, this action is due to heating, which is of a special kind in so far as the distribution of energy in ultra-short waves is different from the ordinary warming. With the great vessels it can probably be truly assumed that the vasa-vasorum dilate, bringing about nourishment of the vessel walls. It is improbable, however, that the calcium is dissolved; and this would not be at all desirable, for calcium is deposited in those places where the tissues have degenerated, and serves, in atheroma, chiefly to replace the degenerated elastica and so support the weakened vessel walls. The loss of this calcium, if at all possible, might lead to bursting of the vessel walls.—R. KING BROWN, B.A., in *Br. J. Phy. Med.*, Jan., 1938.

Ultraviolet Treatment of Erysipelas

ULTRAVIOLET RADIATION is the most effective treatment for erysipelas. This is a point of importance in view of the fact that erysipelas is a very fatal disease in infancy and old age.

Technic: The dose should be from 5 to 20 erythema doses, on the affected skin and a margin of from one to three inches of normal skin. In facial erysipelas, the eyelids were left uncovered if they were involved; otherwise, the eyeballs were covered with small circles of paper, leaving the eyebrows exposed. When multiple exposures were used, the edges were never allowed to overlap. In most cases, no packs of any sort were used, because they seem to inhibit the development of maximum erythema. Sterile white petrolatum was applied at times, after wrinkling and desquamation had begun, to relieve the feeling of tenseness of the skin. *A heavy dose must be used*—best 20 times the erythema dose; if the machine is old, an even greater exposure must be used.—MILAND E. KNAPP, M.D., in *Arch. Phys. Ther., X-Ray, Radium*, Sept., 1937.

Radium in Surgical Parotitis

THE MORTALITY of 42 consecutive cases of non-epidemic (or surgical) parotitis treated with radium, was only 16 percent, as contrasted to the usual 50 to 60 percent mortality.—W. E. COSTOLOW, M.D., in *Rad. Rev.*, Mar., 1938.

Diathermy for Delayed Healing of Fractures

UNION OCCURRED in 78 percent of cases of delayed healing in fractures, after the use of low-milliamperage diathermy. The treatments were given on alternate days, for thirty-minute periods. From ten to forty treatments were required. Electrodes were applied opposite to each other whenever possible, even though windows need be cut in casts. Once in a while cuffs were applied above and below, or some other technic used. Casts or splints were used for immobilization in most cases, until union was complete. Definite thickening of the soft callus surrounding the fracture occurs after about the eighth treatment; this steadily hardens until union occurs. Clinical union is frequently not indicated by the roentgenogram, even when function is good. —ALLEN F. VOSHELL, M.D., in *Arch. Phys. Ther., X-Ray, Radium*, Sept., 1937.

Hemangioma in Babies

FROM EXPERIENCE in our clinic, it appears that comparatively few physicians are yet aware of the importance of early treatment of vascular nevi on the skin of infants. A large percentage of these "birth-marks" increase in size and earlier treatment is simpler, shorter, and less disfiguring than later treatment applied to a larger growth.

Frequently mothers tell us that their physicians have advised them to wait for two or three years before treatment is undertaken. —G. C. WILKINS, M.D., in *Rad. Rev.*, Mar., 1938.

Radium in Keloids

KELOIDS SHOULD NOT BE EXCISED, as they will almost invariably return. Careful, repeated treatment with radium will gradually melt away the thickened scar tissue. Care must be taken to avoid too violent actions, on account of the danger of producing secondary telangiectasis. Keloids respond best to gamma radiation, with enough intensity to produce moderate erythema each time.—G. C. WILKINS, M.D., in *Rad. Rev.*, Mar., 1938.

Postoperative Infrared Irradiation

POSTOPERATIVE IRRADIATION with infrared rays will relieve pain and promote more rapid healing. Miller removes the dressings from laparotomy wounds 48 hours after operation, exposes the operative incision to infrared rays for a period of 30 minutes, and follows this with general ultraviolet irradiation administered sectionally, giving two minutes to each quarter of the body. The times of exposure are gradually increased from day to day until the patient leaves the hospital. Rapid relief of pain (especially in "over-drawn" skin sutures), and freedom from postoperative intestinal stasis and retention of urine, result from this therapy. *Patients thus treated are able to leave the hospital three days earlier* than those treated with stupes, morphine sulphate, and fomentations.—R. DOUGLAS HOWAT, L.R.C.P. (Edin.), in *Br. J. Phys. Med.*, Jan., 1938.

Radium in Thymus Enlargement

IN CHILDREN with persistent thymus at birth, which gives rise to respiratory distress, the application of radium is an effective emergency treatment, and very often life-saving.—IRA A. KAPLAN, M.D., in *Rad. Rev.*, March, 1938.

Naso-Pharygneal Catarrh

THE CHRONICITY of naso-pharyngeal catarrh is maintained by inefficient drainage throughout the lymphatics of the neck. If available, the application of the Kromayer lamp once a week for three or four treatments assists materially, but, in any event, *massage of all the glands*, given daily for two weeks or longer, will effect a striking improvement.—DRURY PENNINGTON, B.A., M.R.C.S., in *Br. J. Phys. Med.*, Mar., 1938.

Infrared Therapy

DIATHERMY IS CONTRAINDICATED in sinusitis, because the pus is confined. Infrared radiation relieves pain and assists resolution. Infrared rays relieve pain and further the drainage of nasal furuncles, before and after incision. Instead of "squeezing" boils and carbuncles after incision, apply infrared rays, for from 10 to 20 minutes at a distance of 10 inches. The pus literally pours out, the pain is greatly relieved, and resolution is advanced by the enormous vasodilation, resulting in an increased flow of fresh arterial blood to the affected area.—R. D. HOWAT, L.R.C.S., L.R.F.P.S., in *Br. J. Phys. Med.*, Jan., 1938.

Short-Wave Therapy in Gynecology

SHORT-WAVE THERAPY resulted in a rapid disappearance of infected and foul lochia in a series of puerperal women. The patients reported that pelvic pain and tenderness were relieved by such therapy.

Subinvolution of the uterus responded promptly to deep short-wave therapy, after the usual oxytocics had failed. Dysmenorrhea did not respond especially well.

The most constant results were obtained in patients complaining of myalgias of the extremities, back, and neck. Breast abscesses went on promptly to pus formation or were absorbed rapidly, without suppuration. Phlebitis patients did not respond any more quickly than to other forms of treatment, but relief was obtained earlier and was more lasting.—E. G. WATERS, M.D., in *Am. J. Obst. Gyn.*, Jan., 1938.

LET WELL ALONE

If a man is fat or lean, and feels well, having all bodily functions acting regularly, with sound sleep and no discomfort after eating, he should by all means let himself alone.—DR. W. W. HALL (*1871*).

★ Books ★

Pohle: Clinical Roentgen Therapy

CLINICAL ROENTGEN THERAPY. *Edited by Ernst A. Pohle, M.D., Ph.D., F.A.C.R., Professor of Radiology, Chairman, Department of Radiology and Physical Therapy, University of Wisconsin, Madison, Wisconsin. Foreword by G. W. Holmes, M.D., Roentgenologist to the Massachusetts General Hospital and Professor of Roentgenology in Harvard Medical School, Boston, Mass. Philadelphia: Lea and Febiger. 1938. Price, $10.00.*

This work represents the practical applications of the theoretical principles discussed in the author's companion volume, "Theoretical Principles of Roentgen Therapy." Seventeen radiologists have contributed to this volume, and thus collaborated on the first comprehensive textbook on roentgen therapy in the English language.

The purpose of the volume is an entirely practical one. It discusses the treatment of various conditions which are amenable to roentgen therapy, and offers a practical guide as to the details of the treatment.

The division of the subject matter into chapters which discuss diseases of each system of the body, permits rapid reference to desired information. The tone throughout is conservative, and is thus in welcome contrast to the superoptimism often displayed by radiologists. The treatment of hypertension (Hutton) is mentioned as are several other methods of roentgen therapy for high blood pressure; the comment is made that no final figures are given.

Golden and Henderson believe that roentgen therapy has little place in the therapy of heart and circulatory disorders, with the possible exception of thromboangiitis obliterans.

The irradiation of huge renal tumors is presented clearly. Roentgen therapy causes a marked decrease in size, often within a few weeks, and thus permits the surgical removal of many of these tumors which would otherwise have been inoperable. The question is raised as to what becomes of these large masses when they disappear so quickly, a problem that has troubled many observers.

The practical nature of the work may be gained by reviewing the chapter on roentgen therapy of breast carcinoma. Study of the common areas of lymphatic dissemination indicates the fields to be included in the treatment. Discussion is made of pre- and postoperative irradiation and comparative statistics cited.

A more useful book on the subject can hardly be imagined.

Electroradiotherapy

TRAITÉ D'ÉLECTRORADIOTHÉRAPIE. *Published under the direction of L. Delherm, Electroradiologist to the Hôpitaux de Paris, etc., and A. Laquerrière, Professor at the University of Montreal, Can., etc. Paris, France: Masson & Co. 1938. Price, stitched, 440 Fr. ($14.00); bound, 480 Fr. ($15.00).*

This massive, two-volume book of 2018 pages, with 450 illustrations, is the work of 80 collaborating electroradiologists of France and other countries, and embodies the most modern as well as the time-tried methods in use in these two physical therapy specialties. It is intended for the use of general practioners as well as specialists, and lays special stress upon full details of the technics of the various agencies described, and the indications and contraindications for their use.

All physicians who are using physical methods of treatment extensively, and who are able to read French, will find these volumes a veritable mine of useful and practical information.

★ News ★

Radium in the United States

A PROMOTIONAL NEWS RELEASE from the Eldorado Gold Mines, which claim to be the only important producers of radium in the Western Hemisphere, contains some statistics regarding that metal, which are probably reasonably accurate.

The reason why radium is so expensive is that it takes about a million pounds of high-grade ore to yield one gram of the metal. The all-time high price of radium was $125,000 a gram; it is now worth about $25,000 a gram.

The world's present supply of radium is about 600 grams (a bit less than a pound and a half—scarcely enough to make a 2-inch cube), valued at about $15,000,000, of which about 225 grams are believed to be in the United States, but cannot all be located. In New York City, Bellevue Hospital has 9.5 grams, and Memorial Hospital, 8.9 grams. Other Eastern hospitals have 33.5 grams, and they need about 50 grams (not quite 2 ounces) more to meet present needs, which would cost about $1,250,000, at present prices. The deficiency of radium to meet needs in the rest of the country is probably even greater.

A Living for the Doctor

The Business of Medicine and the Art of Living

★

Associate Editor: Ralph L. Gorrell, B.S.M., M.D., D.N.B.

The Physician's "Customers"

MOST PHYSICIANS speak of those who seek their professional services as patients; some call them clients, borrowing the legal phrase; a few of the older men, especially in rural districts, still allude to them as "patrons"—a hold-over from medieval times, when the man of medicine was a hanger-on at the court of some prince or noble, on a parity with the jester and the "clark," and rendering service to the person and family of his "patron."

Of late, sport reporters have adopted the custom of describing those who part with their shekels to purchase the privilege of witnessing pugilistic encounters, as "customers." It sounds peculiar, at first (and doubtless was used for that very reason), and would, perhaps, appear even more unusual if applied to the people who call upon the physician for help; but there would, we believe, be certain points of merit in thinking of the doctor's "customers."

In the first place, if the physician thought of his patients as customers, he would visualize them as persons who came to him to buy something (his expert services) which they considered to be worth money — like shoes or shirts or golf balls or cigars; and, realizing that he had a valuable commodity for sale, he would have no hesitation in discussing its price with his "customers" and arranging for a prompt and businesslike payment of the account.

So long as physicians think of their patients as "patrons," they can scarcely help feeling that these people are doing them a favor when they seek professional advice; to ask them for money seems almost as if the friend who has entertained one overnight should demand payment for board and room in the morning. We will never cease to deserve the reproach of being "poor business men" until we begin to *think* of our patients as customers — whether we *call* them that or not.

But there is an even more important side to this question. The merchant who allows his shelves to become cluttered up with a stock of antiquated goods will soon find that the shadow of a purchaser rarely darkens his doorsill. Most of them realize this and when, through poor judgment in buying, such a condition occurs, they hasten to unload the slow-moving articles, even at a financial sacrifice, so as to make room for merchandise which will attract customers to their places of business. The annual inventory gives them valuable information along this line.

How many physicians ever stop to take an inventory—not of the drugs, instruments, and apparatus in their offices (these are only working tools, not the things they sell to their patients), but of the stock-in-trade of ideas, knowledge, skill, tact, courtesy, sympathy, and the like, for which they expect their "customers" to pay them money?

Such an inventory would, we fear, reveal, in some cases, a mass of frowsy, shop-worn, out-of-date items, heavy with the dust of carelessness and inertia and musty with the mildew of ancient tradition and usage. How can one expect people to pay good prices for things like these? If we are catering to "customers," we must fill our warehouses with strong, substantial, serviceable, valuable goods; not showy, tinselly things which will catch the eye, but such as will give continuing satisfaction, year after year.

The dumping of the old, moth-eaten, unserviceable stuff will entail no financial loss; but the sacrifice of preconceived notions, pernicious habits, cherished superstitions and prejudices, and other such will be more painful than the cut prices on any postinventory sale. Out they must go, however, in order to make room for the new merchandise which will be supplied by diligent study of modern textbooks and sound professional periodicals, and by attendance at postgraduate courses and medical society meetings.

When the new stock is in, the prices must be marked in accordance with the intrinsic worth of the articles, and *these prices must not be cut.* If we feel that someone, who is unable to pay the price and who is outside the reach of the constituted charitable agencies, is in dire need of our services, let us *give* them, but not cut prices. There is, and of course must be, an elasticity in adjusting the fees for major professional labors to the circumstances of the patient, which would be abhorrent to a modern merchant, but the charges for house and office calls and other minor services should have a high degree of stability and regularity.

Every citizen may be entitled to sufficient food to maintain life, clothes to cover his body, and shelter from the elements, whether he earns these things or not. At any rate, the charitable organizations and most communities endeavor to furnish them to the destitute. But no one has ever claimed that all men and women have a right to demand automobiles, silk pajamas, and artichokes.

Essential medical care is provided to the indigent, in cities by the free clinics, and in rural districts by the county poor commissioners. There is no more reason why they should have a claim upon the most highly skilled and valuable medical services than there is for furnishing them, free, with *crêpe de chine* chemises and strawberry shortcake. A man has to think whether or not he can *afford* a grand piano or a suit of evening clothes. Why should it be unreasonable that he give equal consideration to his financial ability to employ the highest type of medical attendant?

But if our patients are "customers," they are likely to inspect the commodities they are about to purchase, with a painstaking scrutiny heretofore unknown, and buy where they will receive the most real value for their money. So the thing works both ways.

There is really much food for long and penetrating thought in this question of the physician's "customers."

G. B. L.

★ Notes and Abstracts ★

Professional Diligence

"THE MOST FORMIDABLE WEAPON we possess against State Medicine, irregulars, cults, and other threatening elements is the *conscientious practice of our profession.* No amount of protective legislation that we may pass, can equal the painstaking performance of our daily tasks." *(Bulletin,* Academy of Medicine, Toledo and Lucas County, Ohio).

Why do the cults flourish? Why do advocates of State Medicine find followers? Where but among the dissatisfied, the poorly treated, and the untreated patients of physicians? The great majority of sick people first seek the advice of a physician, and it is only after he fails to give them proper consideration that the patient wanders down the long road of isms.

It is a common experience for physicians who have graduated in the past ten years to have patients tell them, as they have informed me, "You are the first physician I have consulted who has kept a written record of the examination." It is an even more frequent occurrence to find patients, who have been treated by alkalies for years, without benefit of a gastric analysis, who show a low acidity of the stomach contents. "Bleeding hemorrhoids" are injected or removed without a preliminary digital or proctoscopic examination to exclude carcinoma as the cause of the bleeding.

If every physician would examine patients as thoroughly as he would wish himself to be examined, the patient would be satisfied that every attempt was being made to get to the bottom of his case.

A good working rule for keeping the patient's respect: Suggest consultation or referral before the patient demands it, or worse, deserts the physician entirely.

R. L. G.

The Economic Outlook

CALL IT a "recession," call it a "slump," call it a "soft market" or a "buyers' strike"—call it anything you please—but I kind of wish folks would stop talking to me about it—that is, unless they've got something *new* to say, or a different way of repeating something that's old.

As a matter of fact, I wouldn't mind generating a little hard times gossip of my own if I felt it would do any good, or even if I thought I might be able to make some constructive contributions along the lines of new rhetorical effects—*but that's just the trouble.* It seems that all the various ways of describing a recession were highly perfected and widely circulated almost ten years ago, and now they are becoming a bit hackneyed.

Now don't get me wrong—I don't mean to assume a Pollyanna attitude. I'm not trying to dodge the facts and I don't exactly want to play ostrich. I know that business isn't anywhere near as good as we'd all like to have it, but I feel that I have already done my share of listening to people talk about "general conditions" and now I'd like to be let alone for a while.

I speak only for myself. I don't mean to imply that economic discussions should be barred altogether, because there are those among us whose business it is to study such things, *and you can't blame a man for talking about his job!*

But I've got a suspicion that there are very few of us who are in a position to help the general situation through talk alone. Maybe the economists can—*although I sometimes kind of doubt it.* Maybe the big business leaders can—*except that they don't seem to have time to do much talking.* Maybe the politicians can—*but having once been a good old-fashioned Democrat, I reserve my opinion!*

Aside from all that I've got a hunch that maybe the best way for me, personally, to help the general situation is to buckle down, dig in, and do as good a job *on my job* as some of the professional pessimists are doing on theirs.

I'm not saying that my work is important. It may be quite UNimportant as bearing on the broad economic situation.

I recall the story of the young minister who, after having graduated with honors from a leading theological seminary, was sent to some far-away and sparsely settled section of the country, there to pursue his noble calling. . . . Some time later the Bishop paid him a visit and asked him how he was doing, whereupon the ambitious young sky pilot expressed his discouragement by saying that he was exerting so little influence on the welfare of mankind that he felt like a tiny little bird pecking away at a barren mountain of stone.

The Bishop answered, *"Yes, but just look what it will do for your beak!"*

So, from my own selfish viewpoint, my work is mighty important. It serves as a buffer against hard times. It gives me something to occupy my mind. It helps to pass the time away. It sharpens the beak. It's good for the soul.

And incidentally—as a sort of "by-product," so to speak—there's a bare chance that it may, directly or indirectly, contribute just a trifle to the economic welfare of the country as a whole—but that's somewhat beside the point because I don't want to get into competition with the professional country-savers any more than I want to compete with the bearers of ill tidings.

So, here and now, I'm declaring a sort of individual moratorium on discussing the general economic situation.

HENRY G. WEAVER

Detroit, Mich.

The Healing Presence

THE OLD-FASHIONED family doctor treated people. The physician of today treats disease. The germs in the beard of the old fashioned doctor are well consigned to the limbo of forgotten things, but what needs to be raised again from the dead is the kindly, encouraging, human look on the face of the old-fashioned practitioner, that made the suffering human being feel that here was a friend who was both willing and able to pull him through the rough places and whose presence was almost as excellent a panacea as his pills.—*N. Y. S. J. M.*, May 1, 1938.

The Future of the Family Doctor*

ALL is not well with the family physician; he feels discredited, discouraged, and insecure about his own future and the future of the profession. He feels that he does not fit into the scheme of things.

If the family physician is left out, the most important thing in medicine is missing; that is, *diagnosis*, in its widest sense. This is by far the most valuable part of the practitioner's function.

The doctor must meet his colleagues frequently, and change his attitude of suspicion toward other physicians and even of his patients. The day has past when medical men can exist independently.

He should try to cater to his intelligent

*Br. M. J., Jan. 22, 1938.

patients a little more and be prepared to give simple explanations to them, just as much as he gives dictation to the less intelligent. In this way, patent medicine mongers can be put out of business. He should throw the wholesale chemists' and pharmaceutical houses' blandishments into the fire, and thereby give his patients more thought, instead of making them a market for commercial enterprise. The physician should remember that he is the most powerful of the public servants.

LORD HORDER.

London, Eng.

[Conditions in Great Britain may be such that physicians can afford to throw away the literature sent to them by the pharmaceutical manufacturers, but it certainly is not so in the United States, where much material of great and permanent value reaches medical men in this way. Of course, much worthless literature is thus sent, by the borderline type of drug purveyors, but the intelligent physician is supposed to be able to exercise *discrimination*, and not "throw out the baby with the bath water." —ED.]

Clinical Staleness and Consultations

IF YOU ARE in doubt or difficulty about a clinical problem, never hesitate to ask the opinion of a colleague.

One of the great pitfalls of medicine is the state which has been described as "clinical staleness." It is an accurate and appropriate description, and here is what it implies: You are concerned with the treatment of a case; things are not going so well as they should, and you feel dissatisfied and perhaps disheartened. You know within yourself that the problem wants thinking out afresh, and yet your mind is so oriented by the influence of the original impressions that you are unwilling to make the new effort. You are suffering from clinical staleness, an affection to which every one of us is liable, and a malady of great significance, both to you and to your patient. If you are conscious of it, I beg you not to hesitate, but at once to enlist the opinion of another. He may not be as knowledgeable as you are, but he comes to the problem with a fresh mind, and, looking at things from a different and fresh angle, may give you most valuable help.

I know how difficult it may be to bring oneself to ask assistance from another. You feel that you are making confession of your own failure, and that you may prejudice yourself in the eyes of your patient and his friends. I assure you that these are misapprehensions. You are not belittling yourself; you are exhibiting a strength of mind which excites admiration and approval, and all my experience tells me that patients are invariably appreciative of this attitude, which says, "I am uncertain and I want another opinion."

Do not misunderstand me. This advice does not imply that you are not to know your own mind or to make your own judgments; the very reverse! The advice is that if, having done your best to arrive at a decision by all reasonable means, you are still uncertain about it, do not hesitate to ask the opinion of a colleague. Choose him well, I agree, but it is very unusual to be "let down." The right man knows the meaning of being given a confidence, and he also appreciates the significance of *esprit de corps*. —SIR JOHN FRASER, M.D., in *Brit. Med. J.*, Apr., 1938.

Doctors and the Public*

INTEREST in the relationship of doctors and their patients has been heightened by the appearance of Cronin's "Citadel." The book deals with the struggles of an earnest young Scotsman who, within a few days of qualification, realizes that much he has been taught is complete nonsense, and that the medical world as a whole is rotten. He then proceeds to put it right, but in the process is lured from the straight and narrow path by the fleshpots of Mayfair. He then starts to make money by giving unnecessary injections to still more unnecessary females.

Ostensibly the book's aim is to indicate the advantages of group medicine. The public, however, discarded what good there was in the book, seized upon the murky incidents, and concluded that most of us are rogues.

To return to the gospel of a group of specialists practising medicine: Is this really the ideal to aim at? Are there not greater evils to be found in just those districts where the general practitioner has become extinct? The general practitioner *does* preserve the balanced outlook.

The suggestion that three or four practitioners in a town should combine forces and each practise a specialty, is good on paper but the public won't stand for it. Those of us who have been in partnership, know how difficult it is to induce patients to go to one or the other partner, even on one's day off.

Why the undercurrent of dissatisfaction with physicians? We are at a disadvantage

*Guy's Hospital Gazette, Mar. 12, 1938.

because we so often give our services for nothing. I refer not only to the fact that most consultants devote at least one-third of their time to charity hospitals, but also to the many occasions when we all treat patients without hope of payment. The average man thinks there is a catch in this somewhere. He looks for an ulterior motive and, finding none, concludes that this is a gesture to establish moral superiority, and that we will make up for it by making our other patients pay through the nose. *Nine-tenths of the disagreement about fees could be saved by quoting the cost of the treatment prior to undertaking it.*

We should be prepared to descend from our Olympian heights and take the public into our confidence. We should enlighten the layman, as the insurance companies of America are doing. A further line of conduct should be adopted by us, and that is to eradicate some of the evils which exist in our midst. Physicians should not be allowed to give obviously biased testimony in the law courts with impunity, nor to advise treatment which they know to be quite worthless, solely with the purpose of lining their own pockets.

A. H. DOUTHWAITE, M.D., F.R.C.P.
London, England.

How's Your Job?

YOUR attitude toward your job makes all the difference in the world to your ultimate success. Whether you regard it as a mere job and nothing more—just a means of getting a living—or whether you look upon it as a profession, something to be proud of, something to which you are going to give the best that is in you, will decide whether you are going to fail or to succeed.

If you see in your job a chance to make good, a chance to bring out the best thing in you, you will make your life a masterpiece instead of a mere commonplace daub. Everything depends upon the spirit you bring to your work. If you want to make a success of life, you must make a success of your job. You must look upon it as an opportunity to show what is in you, a chance to do the biggest thing that is possible to you.

If you would be an expert, not a mere amateur; an artist, not a mere artisan, you must put soul into your work; you must always think of your vocation with pride, with infinite satisfaction.—*Kalends of the Waverly Press.*

★ *Books* ★

Reed: Health Insurance

HEALTH INSURANCE. The Next Step in Social Security. *By Louis S. Reed, Former Member of the Research Staff of the Committee on the Costs of Medical Care. New York: Harper and Brothers. 1937. Price, $3.00.*

Most physicians will feel that this book is based upon incorrect premises and be prepared to judge it even before they pick it up, but Mr. Reed will surprise many with the accuracy of his views. Despite the environment in which he has been placed, he detects many of the flaws in the proposed schemes for medical care and gives them proper consideration.

Chapter headings well serve to indicate his trend of thought: (1) The Medical Service Industry; (2) The Failure of the Individual Payment; (3) The Obsolescence of Individual Practice; (4) How the Producers, Physicians, Dentists and Nurses, Fare; (5) Private Practice and Medical Idealism; (6) The Case of the Drug and Medicine Industry; (7) Inability to Pay the Price; (8) The Government Steps In; (9) Voluntary Health Insurance; (10) Compulsory Health Insurance; and (11) A (New) Program.

This one inexpensive volume presents the facts concerning old and new programs of medical care in a frank, readable style. Mr. Reed believes that the medical unit of the future will be the hospital and a constituent group of specialists. Who is to integrate and potentiate these groups? Not the internist, who is interested in the patient's blood cholesterol and the size of the cardiac shadow; not the surgeon, who is perfecting a faster technic of enterorrhaphy; not the otolaryngologist, whose interest descends no further than the clavicle. There must be primarily a physician who knows something of *all* fields and yet is not enthralled by one. *If the general practitioner masters general medicine and surgery and is interested in his patients as people, as well as problems for diagnosis and treatment, he will make a permanent place for himself.*

Mr. Reed feels that government or "state" medicine is sure to come in the immediate future. Events of the past few years would seem to indicate that this view is based upon facts (county, state, and federally paid medical care; the rise of health departments; critical attitude of the lay press). The "stand-pat" attitude of our American Medical Association furnishes the critics with plenty of ammunition, even though we may agree with their basic stand against the regimentation or communization of medical practice.

A PRAYER

O beloved Diety, grant me to become beautiful in the inner man, and that whatever outward thing I have may be at peace with those within. May I deem wise men rich, and may I have such wealth only as a prudent man can either bear or employ.—SOCRATES.

The Seminar

"A Monthly Postgraduate Course"

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(NOTE: Our readers are cordially invited to submit fully worked up problems to the Seminar and to take part in the discussion of any or all problems submitted.

Discussions should reach this office not later than the 5th of the month following the appearance of the problem.

Address all communications intended for this department to The Seminar, care CLINICAL MEDICINE AND SURGERY, Waukegan, Illinois.)

Problem No. 6 (Diagnostic)

Presented by N. Odeon Bourque, M.D., Chicago, Ill.

(See CLIN. MED. & SURG., June, 1938, p. 278)

RECAPITULATION: A woman of 26 years, weighing 112 pounds, eight months pregnant, developed persistent, cramp-like pains around the umbilicus, radiating over the abdomen. She vomited only when given anything by mouth, and passed some gas and fecal particles when given enemas, but not spontaneously. Her temperature was 99.50 F.; pulse, 100, regular and strong; blood pressure, 120/60. Her small abdomen was well filled by the pregnant uterus, but there was no perceptible rigidity of its walls, though there was general tenderness, relieved by pressure. Her urine was loaded with acetone and diacetic acid and showed a trace of albumin; her blood count showed 30,000 leukocytes, with 74 percent polymorphonuclears; the liver dullness was not obliterated.

Two years previously she had undergone an appendectomy for a ruptured appendix, and the wound drained for 3 months. The preceding night she had eaten a large meal, consisting principally of mushrooms.

Requirements: Suggest a tentative diagnosis, *giving reasons*, and treatment. What further information would *you* require?

Discussion by Charles L. Coyle, M.D., Marshfield, Ore.

The first thing I thought of after reading this problem was botulinus poisoning. Other possibilities were appendicitis, mushroom poisoning, diabetes, gastric crisis of tabes, and intestinal obstruction. The history of an appendectomy will rule out appendicitis, and intestinal obstruction would cause continual vomiting, whether food was taken or not, and symptoms of shock, whereas here we have a regular, slightly accelerated, strong pulse and normal blood pressure. The procedure for ruling out diabetes or tabes is obvious.

On the presumption of possible food poisoning, I should immediately wash the stomach with tap water until the washings came back clear. Then I should give a saline cathartic and repeat as often as necessary until the bowel was completely cleaned out.

To prevent the onset of premature labor, if possible, I should inject 1 cc. of corpus luteum, and in case labor pains did start, I should continue giving corpus luteum and stop the saline cathartic. After the nausea disappeared, the corpus luteum could be given by mouth in 5-grain capsules. The pregnancy may be responsible for the nausea, but is probably not related to the other symptoms. The patient is to remain in bed, of course.

I should give atropine, gr. 1/100 (0.6 mg.), hypodermically, to try its effect on the cramping pains. I should take a sample of blood for a Kahn test and another, after an interval of 12 hours, for a blood-sugar determination. I should withhold food until the fasting blood sugar was known, and allow neither food nor water while the patient was nauseated. If the blood sugar was above normal, I should start the patient on a suitable measured diet. I should refrain from giving either morphine or intravenous injections of dextrose until the diagnosis was made. Proctoclysis with tap water, or if that was not tolerated, physiologic saline solution, under the skin or intravenously, can be used instead, if there is any dehydration. What I should do after the first 24 hours would depend on the condition of the patient at that time and the results of the two blood tests.

Discussion by S. M. E. Simon, M.D., Williamson, W. Va.

There are several points to be classified before any one could make a complete diagnosis in this particular case. Among the points missing are:

1.—The patient's heart and lung conditions.

2.—The microscopic urinary findings.

3.—The Kahn or Wassermann test.

4.—The condition of the fetus as to position and size.

5.—Whether the woman is a primipara or multipara.

6.—The size of the pelvic outlet and whether there is any abnormality.

7.—Examination of the vomitus.

The history states that the patient vomits when she takes anything by mouth. This vomiting could have different causes; for instance, toxemia of pregnancy or irritation caused by pressure; also a gastric upset caused by mushroom poisoning. It was not stated what kind of mushrooms the patient ate, but assuming that the mushroom poisoning has nothing to do with the cause, there is one condition which would explain the symptoms described, and this is a *partial intestinal obstruction.* No statement is made in this history giving other symptoms of diabetes, so that we can minimize the presence of diacetic acid and acetone in the urine of this patient; however, the fasting blood-sugar level should by all means be determined.

The patient once had an operation for appendicitis, with drainage, which could have caused adhesions resulting in a partial intestinal obstruction. An ovarian cyst or torsion of the pedicle must also be considered.

A neurosis, which we sometimes see caused by early toxemia in late pregnancy, can be easily treated by synthetic vitamin B_1.

It appears that surgical intervention may be necessary; and in my opinion the delivery of the fetus by cesarean section, with an exploration of the abdominal contents, would undoubtedly elicit the true pathologic condition and reveal the further course of conduct on the part of the surgeon.

It is entirely possible that more complete physical and clinical findings would change my opinion as to this diagnosis and method of procedure.

Discussion by E. C. Junger, M.D., Soldier, Ia.

This problem has all the earmarks of "Why doctors get gray." Why should any woman eight months pregnant go out for a big feed before bedtime? I blame the mother-in-law more than the mushrooms.

This patient undoubtedly had plenty of adhesions in her abdomen, as a result of the long drainage following her operation. The growing uterus, pushing up the intestines, caused traction on the cecum and ileum, which were fixed in the pelvis, thus kinking, compressing, and obstructing their lumens.

With the urinary picture presented, I should be tempted to empty the uterus by the abdominal route, if the patient's condition permitted, and at the same time to explore the abdomen, in order to relieve the apparent obstruction.

Discussion by R. L. Gorrell, M.D., Clarion, Ia.

The abdominal pains, leukocytosis, abdominal tenderness, and acetonuria may all be explained on the basis of a diabetic acidosis. Dr. Gray, in the May, 1938, issue of the *Western Journal of Surgery, Obstetrics and Gynecology* writes:

"It has been my privilege to have seen quite a number of cases of acute abdomens occurring in diabetic patients. In this group, I believe that diabetic acidosis has reproduced almost all the manifestations of pyogenic disease in the abdomen that one could name. Fever, leukocytosis, abdominal pain, rigidity and tenderness appeared in diabetic subjects. Nausea, vomiting and rebound tenderness also were present.

"Our present principle in handling such cases is to assume that the patient's symptoms, when admitted to the hospital, are due to acidosis. If due only to acidosis, they will disappear within a short time, without any other treatment than that of injection of physiologic saline solution intravenously."

If gentle pressure on the abdomen *relieves* the pain, there is probably no surgical lesion present (torsion of an ovarian cyst, appendicitis), although more data should be given to rule out ileus and appendicitis.

Did *repeated* enemas continue to bring forth fecal material and gas? Appendicitis in pregnancy may be identified by a point of tenderness, which rises superiorly and latterly as the pregnancy advances.

No data are given in regard to the uterus, its size, position or contractions. Any intrauterine cause of pain could be located by the finding of uterine contractions, or by change in size. Premature separation of the placenta would result in a severe, tearing type of pain, accompanied by the passage of blood (often of a thin, watery con-

sistency) from the vagina, and an increase in the size and firmness of the uterus.

The eating of mushrooms necessitates the consideration of poisoning by such fungi. There are 70 species capable of causing toxic symptoms (Trumper, in "Memoranda of Toxicology." Blakiston's Son & Co., 1937), but only two need be considered:

1.—*Amanita phalloides*, "the destroying angel," which is abundant and widely grown, and unfortunately has a pleasant taste. It is the most poisonous variety of mushroom, and causes 90 percent of the deaths from mushroom poisoning. After ingesting this mushroom, there is a lapse of from five to ten hours before severe abdominal pain, nausea, and vomiting appear. Diarrhea and colic follow. The pulse is poor, the temperature subnormal, and cyanosis may be present. The liver is enlarged and painful on pressure. Anuria appears and is followed by coma, which eventuates in death due to circulatory failure.

2.—*Amanita muscaria:* This mushroom produces typical pilocarpine effects—sweating, profuse salivation, severe vomiting, and diarrhea. Mental disturbances may be present.

Poisonous mushrooms may be eaten by certain persons without apparent harmful effect. Trumper mentions the case of a French officer and his wife who died from eating mushrooms which others in the house ate without inconvenience.

It would seem that mushroom poisoning could be ruled out on the basis of the patient's good condition after many hours of exposure to any such toxin.

Appendicitis must be considered in the differential diagnosis, as appendectomy may not have been performed previously. The symptoms are typically those of this condition, if diabetic acidosis could be ruled out by intravenous saline therapy.

Solution by Dr. Bourque

Diagnosis: Incomplete obstruction of the jejunum, with non-septic peritonitis.

Treatment: Laparotomy, with severing of two organic bands causing the obstruction.

Problem No. 8 (Surgical)*

Presented by J. R. Verbrycke, Jr., M.D., Washington, D. C.

Q. R. J., age 29, whose past health had always been good, suffered an attack of scarlet fever two years ago, since which time he has had trouble with his stomach.

Complaints: Belching, bloating, and intermittent attacks of cramp-like pain in the left hypochondrium. These attacks would last several days, and the pain would be so severe that he could hardly straighten up. Vomiting always accompanied these attacks and appeared to give relief.

When I examined him during an attack, the abdomen was found to be scaphoid, the recti tense and so irritable that they contracted at the least touch, but nothing localized was found. There was no fever; blood studies were negative; and urinalysis revealed only a trace of albumin, without casts or pus cells.

Shortly afterward, in another attack, the abdomen was found to be greatly distended, as rigid as before, and a tympanitic percussion note could be obtained up to the left nipple. It was necessary to employ purgative enemas and hot abdominal poultices to reduce the distension. Several hypodermic injections of morphine and atropine were used to relieve his pain.

A series of gastrointestinal roentgenograms showed a greatly dilated colon, running up to the left diaphragm and pressing on the cardiac end of the stomach, near the seat of the greatest pain.

Laparotomy was performed and a thick band was found, which completely surrounded the splenic flexure of the colon and bound it to the anterior abdominal wall just under the diaphragm. This band was removed, along with other, finer adhesions, which were located between the spleen, omentum, and colon. These findings were in exact accord with roentgen-ray examination and adequately explained the symptoms, but within a month, the patient suffered another severe attack of abdominal pain, which was identical with those which he had had previously.

Requirements: Suggest a tentative diagnosis and treatment, *giving reasons.* What further information would *you* have required to arrive at a definite diagnosis?

*Adapted from *Urol. & Cut. Rev.*

Clinical Notes and Abstracts

★

Surgical Shock*

SHOCK IS A disturbance of functional equilibrium characterized clinically by reactions of depression, which may be severe enough to prove fatal. It is often associated with severe hemorrhages or precocious toxemias, increasing the difficulty of appreciating the relative importance of each etiologic factor.

Four vital processes are notably depressed:

1.—Subnormal temperature.
2.—Feeble, rapid, and irregular pulse.
3.—Shallow and sighing respiration.
4.—Low blood pressure.

Varieties:

1.—True nervous shock.
2.—Primary shock (trauma).
3.—Secondary shock (hemorrhage, pain, sepsis).

Causes: Usually a variety of factors are involved:

1.—Severe blows on the chest, abdomen, testes, etc.
2.—*Rough handling of viscera, mesentery, and parietal peritoneum during operations; undue prolongation of operations, with chilling of the viscera; intussusception; strangulated hernia; etc.*
3.—Extensive burns of the skin.

In all three of the above causes, the rapid repetition of painful impulses from peripheral nerve-endings causes exhaustion or inhibition of the medulla.

4.—Hemorrhage (may or may not be combined with shock).
5.—Obstruction of vessels (thrombosis, embolism).
6.—Bruising of muscles (aseptic traumatic toxemia of Cannon).

Absorption of toxic products into the circulation produces a dilatation of capillaries and a pooling of blood within them. There ensues an abnormal permeability of the endothelial walls, escape of plasma into the loose cellular tissues, and concentration of blood corpuscles within the vessel walls. Histamine from crushed muscle cells is believed to be the causative factor in shock.

7.—Infection. (Precocious septicemia may manifest itself within a few hours of the trauma).
8.—True psychic shock.

Treatment

Shock will be *prevented or minimized* by decreasing painful stimuli by:

1.—Immediate immobilization of fractures; physiologic rest of all injured tissues.
2.—Adequate doses of morphine, provided an accurate diagnosis of the lesion or lesions is not thereby masked.
3.—Rapid, accurate, and gentle handling of tissues during any and all operations.

Shock will be *relieved* by:

1.—Heat to the body, including the extremities.
2.—Hot drinks (unless contra-indicated by the presence of visceral lesions).
3.—Lowering of the patient's head (except in lesions of the head, heart, or lungs).
4.—Checking of hemorrhage.

In cases of internal bleeding, diagnosed pre-operatively or suspected, shock should not be treated until the surgeon is ready to seek and check the source of the hemorrhage;—i.e., he should treat shock and hemorrhage simultaneously. The mistake, frequently fatal, of stimulating a patient in shock without having previously ruled out hemorrhage is so often made that a few remarks on elementary physiology would seem indicated.

In shock, particularly when associated with hemorrhage, the cardiovascular system is at its lowest ebb. The pulse is rapid and thin; the blood pressure is below normal; the respirations are shallow. Blood issuing from a torn solid viscus or a lacerated artery or vein flows more and more slowly, and prompt clotting occurs. The hemorrhage ceases and remains in abeyance *as long as the patient remains in shock.* Unwise cardiac stimulation increases heart action and raises arterial tension. The primary clot is loosened, secondary hemorrhage occurs, and the already depleted patient expires.

*Bulletin Ravenswood Hosp., No. 3, 1937-'38.

5.—Blood transfusion, in all extensive hemorrhages.

6.—Intravenous injection of a 6-percent gum-acacia solution, for shock not associated with bleeding.

In shock, physiologic saline solution is illogical and harmful, because the fluid escapes through the dilated capillaries and further increases the pooling of serum in cellular spaces. Gum-acacia molecules are too large to escape through the vessel walls.

7.—Absolute psychic and physiologic rest after any surgical intervention.

GEORGE DE TARNOWSKY, M. D., F.A.C.S.
Chicago, Ill.

Mouth-to-Mouth Insufflation in Asphyxia

THE MODE of resuscitation that has given me best results in cases of severe asphyxia, is the immediate application of mouth-to-mouth insufflation. In a number of instances, with patients apparently dead, this method has produced striking resuscitations. Physiologically, this is a sound procedure, because it allows the immediate administration of the correct mixture of carbon dioxide in oxygen, under correct conditions of temperature, moisture, and pressure, and at the proper intervals.

I feel that manual artificial respiration is of little value in the management of the more severe forms of asphyxia. Oxygen must be forcibly introduced into the lungs of such patients. I agree perfectly with Yandell Henderson that, "After the body is flaccid, no form of manipulation can induce the slightest inspiration. The inspirations that occur between compressions are produced wholly by the tonic elasticity of the victim's mid-expansion." — POL CORYLLOS, M.D., in *S. G. & O.*, April, 1938.

Management of Hemorrhage in the Third Trimester of Pregnancy

MANY EARLY CASES of premature separation of the placenta go undiagnosed. They may be recognized by the appearance of a restricted, palm-size area of true uterine tenderness, accompanied by steady sacral backache, which may be relieved, often within twenty-four hours, by giving massive doses of vitamin E (wheat-germ oil).

No bag was employed in 18 cases of placenta previa and premature separation of the placenta, nor was Braxton-Hicks' version done. *Blood transfusions were given early*, as it is the only fluid that will benefit the patient permanently. *Do not make a rectal examination in a bleeding case*, as it damages without revealing. A vaginal examination, under aseptic conditions, is more informative, and rupture of the membranes can be done at this time, if necessary.

Low placental insertion is best handled by rupturing the membranes and allowing the head to tampon the cervix. Occasionally, a sterile vaginal pack may facilitate the dilatation of a long, conical cervix in a primipara. Cesarean section is my choice for partial placenta previa, and is *demanded* by a centrally situated placenta. The use of forceps or fast delivery will result in almost uncontrollable bleeding.

In premature separation, the case without bleeding externally is often baffling, and the only guides are the blood pressure, pulse, and tension of the uterus. Pituitrin, in 2- or 3-minim doses, may be needed to keep up contractions of the weakened uterine muscle.—ERNEST W. FRANKLIN, M.D., in *South. M. & S.*, Aug., 1937.

Ten Doctors and a Headache*

MY TITLE WAS SUGGESTED by a recent article in one of the weekly magazines, in which a moronic individual was interviewed and was examined by ten different physicians because he had repeated headaches which he couldn't cure by home remedies, even those so widely advertised over the radio. Our simpleton friend saw a doctor's sign in a window, and therefore took it for granted that any doctor with a sign could cure a headache. But the expenditure of fees to this doctor, and to the nine subsequent ones, did not bring him relief, with the result that he informs millions of people suffering from headaches that no doctor is worth a tinker's dam, when it comes to headaches.

A local condition in the nose, throat or ear may not be related to the cause of the headache. One boy had one of the worst suppurative sinus conditions I have ever seen, but no amount of local treatment helped until he was told how to stop masturbating. A little girl of nine suffered severe pain over her right eye at irregular intervals. The lateral roentgenogram of the sinuses showed that the clinoid processes encroached upon the pituitary gland. She was stripped and it was noted that there was an overgrowth of hair in the axillae and on the pubes.

It is surprising how few patients realize that their headaches may be due to emotional upsets, general routine of life, poor

*E.E.N.T. Monthly, Mar., 1938.

lighting at work and at home, bad habits such as excessive smoking, et cetera. Happy marital and sexual adjustments must be enquired for.

HAROLD HAYS, M.D., F.A.C.S.
New York City.

An Electric Shaker

ACCURATE blood counts require a uniform distribution of the corpuscles throughout the sample, because the technician must observe and count the number of cells in a small volume, and then compute the number in a cubic millimeter. Those in charge of medical laboratories know how necessary it is to obtain uniform distribution of this huge number of cells, because any error in the count due to poor distribution would be multipled by a large factor.

Courtesy of Fisher Scientific Co.

The Fisher Clinical Shaker with Hemacytometer Pipette Rack.

The new Fisher clinical shaker (pictured here), with a platform for hemacytometer pipettes, insures the best possible distribution of cells throughout the sample because it shakes the pipettes and contents in two planes at the rate of 275 to 285 times per minute.

The same machine will accommodate a rubber-coated metal rack for 18 standard Kahn tubes. This rack cushions the contact of the tubes and silences the undesirable noise which always occurs when the ordinary copper rack is employed in making the Kahn test for syphilis.

I consider CLINICAL MEDICINE AND SURGERY the most practical journal, filled with more information usable every day, than any that comes to my desk, and I take quite a few.—J. D. G., M.D., Miss.

A Reliable Method of Staining Spirochaeta Pallida in Smear Preparations*

FOR THE identification of *spirochaeta pallida* in serous exudates from a suspected superficial lesion, the methods available include immediate examination of the material by darkfield procedure, the application of various staining methods to the smears, and the India ink method.

A staining method is here described which gives more dependable results than other methods, such as Giemsa's, Fontana's, Ghoregeb's, Gelarie's, and others with which I am acquainted.

Experience shows that, except in the hands of well trained examiners, the results of the routine darkfield examinations are not dependable and the proportion of positive findings is much below the actual possibilities.

It is, of course, recognized that the morphology of spirochetes found on the surface of mucosal lesions may be of less significance than that of those found deep in the tissue of biopsy sections, but the finding of spirochetes of the characteristic morphology of *Spirochaeta pallida*, obtained in smears from suspicious lesions, constitutes at least presumptive evidence of the syphilitic character of the lesion.

Developing solution keeps well for from two to three weeks in a light room, after which it deteriorates, the gum mastic separating and settling to the bottom of the container. When this occurs, a fresh supply should be prepared.

Stained smears should be of a brown color.

It is very important to use fresh developing solution; otherwise, the organism will fail to stain.

Technic

Clean the lesion, scrape off material from the ulcerated surface, and prepare smears; dry in air.

1.—Flood smears for five minutes with a warm No. 1 solution, prepared as follows:

Uranium nitrate	1 Gm.
Formic acid (85 percent)	3 cc.
Glycerin (chemically pure)	5 cc.
Acetone	10 cc.
Alcohol	10 cc.

2.—Wash in distilled water.

3.—Treat with a weak solution of gum mastic, freshly prepared, for two minutes. (3 drops of a saturated alcoholic solution of gum mastic mixed with 7 cc. of 95-percent alcohol.)

4.—Pour off the gum, blow the breath

*Adapted from *Gradwohl Laboratory Digest*, May, 1938.

over the surface of the smear, and rinse in distilled water.

5.—Set the slide on a metal stand or tripod; flood it with a 1-percent aqueous solution of silver nitrate; heat with a burner until bubbles begin to form. (*Don't boil!*) Keep at that temperature for three minutes. Repeat the silvering process once.

6.—Pour off the silver and, without washing, apply a thin coat of developing solution and leave under electric light for two minutes, warming gently with a flame.

The Developing Solution:

Hydroquinone	0.31 Gm.
Sodium sulphite	0.06 Gm.
Solution of formaldehyde, 40 percent, neutral	2.5 cc.
Pyridin	2.5 cc.
Saturated solution of gum mastic in 95 percent alcohol	2.5 cc.
Distilled water	15.0 cc.

7.—Wash with distilled water, dry in filter paper, and examine with an oil-immersion lens.

For permanent mounts, dehydrate with absolute alcohol, blot, clear in xylol, mount in gum damar.

ARAM A. KRAJIAN
Chief Technician, Pathology Dept.
Los Angeles Co. Gen. Hosp.
Los Angeles, Calif.

Look for FACTS AND COMMENTS among the advertising pages at the back.

A Safer Technic for Appendectomy

FOR MANY YEARS a controversy has raged over the minutiae of the operative technic of appendectomy. Simple ligation of the stump has been recommended by some surgeons, on the grounds of simplicity and avoidance of burying of an infected stump into a closed cavity (the result of the usual practice of inverting the stump).

Ligation presents these disadvantages: (1) The ligated stump may open and permit fecal contamination of the peritoneal cavity; (2) serosa is not brought into contact with serosa, therefore healing may not be complete; (3) the ligated stump, if infected, will permit spread of the infectious process (Ochsner).

An unfortunate vogue has arisen for ligation of the entire mesoappendix *en masse*. This is an example of poor surgical technic, a reversion to the cruder days of surgery, when large masses of tissue were crushed and tied with one length of wire or catgut. It is safer to apply small hemostats to successive areas of the mesoappendix; then to divide and ligate them individually. Lilly and Ochsner have emphasized this point, and have also suggested that the purse-string suture be placed so as to include the mesenteric aspect of the cecal wall in a loop, and thus prevent postoperative bleeding from a branch of the appendiceal artery in the cecal wall. The appendiceal stump is divided with the cautery and then inverted without ligation; thus, a comparatively small amount of tissue is buried.

R. L. GORRELL, M.D.
Clarion, Ia.

Combined Therapy of Syphilis

TO ATTAIN a permanent cure of syphilis, the following precautions must be used: (1) Administer a sufficiently large dose of neoarsphenamine from the beginning, and throughout the treatment (0.3 Gm. as a primary dose in women, followed by a minimum of 0.45 Gm.; men receive 0.45 Gm. at first, and then 0.6 Gm.); (2) this single dose should be repeated *twice* a week, so that the weekly dose (so important for success) of 0.9 Gm. for women and 1.2 Gm. for men, results; (3) *bismuth is given at the same time as each injection of neoarsphenamine*, but is injected intramuscularly, while the neoarsphenamine is injected intravenously. The ten to twelve injections constitute one course. Two such courses should be given, with an interval of four weeks.

Sodium Salvarsan is often effective in patients who are sensitive to neoarsphenamine, and vice versa.

Injections must be made slowly and carefully. Toxic symptoms must be watched for and prevented by dissolving the drug in calcium or dextrose solution. Thus, *syphilis can be cured quickly*, during the "golden" opportunity, and relapses are rare.—ERICH HOFFMANN, M.D., in *Am. J. Syph.*, Jan., 1938.

Simplified Cholecystectomy*

A SIMPLER, faster technic of cholecystectomy is this: The gallbladder is exposed and the cystic duct and artery ligated. The gallbladder is strongly drawn away from the liver and a Doyen's clamp applied in close approximation to the liver, along the peritoneal attachment of the gallbladder to the liver, and down to the level of the cystic duct ligature. A bowel clamp is then applied beside the Doyen's clamp, and between it and the gallbladder. The tissue between the two clamps (which is the peritoneal

*Brit. M. J., Feb. 12, 1938

attachment of the gallbladder) is then divided with a scalpel. The gallbladder is then clamped just above the ligature, the cystic duct divided, and the gallbladder removed, and with it the bowel clamp. With a full-curved, round-bodied needle, six to eight inches of No. 2 chromic catgut are transfixed and tied at the lower end of the Doyen's clamp, near the cystic duct ligature, and then run up the clamp in a continuous over-sewing suture. When the clamp is removed, a thin, bloodless line of peritoneal tissue will result from pulling tight on the running suture.

Advantages: There is no oozing of blood, as usually occurs during dissection of the gallbladder from the liver; a running suture can be applied in one-fourth of the time required to dissect; there is no possibility of puncturing the gallbladder, and soiling the tissues.

CECIL TUCKER, M.B., B.S.

State Medicine is poorhouse medicine. Tell your patients.

Birth Control*

THE WORDS "birth control" grew out of a need for a changed viewpoint in human relations. Birth control, or maternal health service in its largest sense, is fulfilling a purpose today as a practical demonstration that family life may be built up and enriched through a wise use of this new tool of medicine—the spacing of pregnancies.

When the words "birth control" take on a positive as well as a negative meaning, we shall be further on the right road; but with greater understanding of this new tool it should be turned over to the medical profession and should continue, not as a separate service but as part of the many different medical services.

A day will also come when the present program of interpretation of eugenics and race betterment will be so generally accepted that this function also will pass to educators, social workers, and nurses and become a part of their regular programs; but until the medical and other professions assume these duties, I urge all birth control services to maintain the highest professional standards and to look to the caliber of those who demonstrate the service, being sure that their staffs are not only highly skilled, but of outstanding personality and able to conduct these services in such a way that they may be truly demonstration and training centers in their communities; to make the programs of each service include a positive as well as a negative approach; and to carry on research in both medical and psychologic fields, and a continuing wise interpretation of these ideals to the lay public.

GLADYS GAYLORD
Exec. Secty. Maternal
Health Assn. of Cleveland
Cleveland, O.

J. of Contraception, March 1938.

The "Safe Period"

WHILE THERE ARE SOME WOMEN in whom a safe period must be assumed to exist, the difficulties lie in the variability of ovulation time, the possibility of multiple ovulations during the cycle, and the inability to identify the safe period for most women. The method is not an easy one to adopt and the safe period estimate by the calendar method is not practical. The very people who most need a fairly fool-proof method of child-spacing or contraception, for medical indications or because of poverty, low mentality, or inherited criminality, are those who may be least of all relied on to keep an accurate record of menstruation, and least able to exercise the self-control needed for periodic abstinence.

The fruit of the endeavors to promulgate a practical method of conception control, based on the "safe period," is not yet ripe enough for general consumption.—DRS. I. R. STEIN and M. R. COHEN, in *J.A.M.A.*, Jan. 22, 1938.

The Time Element in Carcinoma of the Stomach

EVERY PHYSICIAN sooner or later has the experience of examining a patient carefully and finding nothing in the stomach to account for vague gastro-intestinal symptoms, only to have that patient return a few months later with a large gastric carcinoma. In such situations, the physician may say to himself, "Did I miss the growth at the time of the first examination, or has it developed in this short time?"

A man of 48 years was operated upon at the Mayo Clinic for an obstructing lesion at the outlet of the stomach, which did not appear malignant, grossly or microscopically, yet within 15 months he returned and a large polypoid carcinoma was found. Within eight months after a man of 30 had been operated upon for ulcer symptoms (nothing abnormal was found), an extensive carcinoma was found at reoperation.

Alvarez and Judd presented a case sev-

eral years ago, which demonstrated that a lesion of a low grade of malignancy can grow for at least three years without becoming inoperable; that *symptoms can disappear for months at a time;* and that the blood may be unaffected by the disease so long as there is little oozing from the growth.—M. W. COMFORT, M.D., in *Staff Meet. Mayo Clin.*, March 9, 1938.

Nutritional Deficiency Disease

ONLY RECENTLY have we realized that a lack of necessary nutritional factors may play an important part in producing symptoms in many different diseases or may explain symptoms for which there has hitherto been no adequate explanation. Thus Mackie has emphasized the importance of nutritional deficiency disease in *chronic ulcerative colitis*, and Weiss in the production of *cardiac symptoms*, when the supply of vitamin B is inadequate.

It has long been observed clinically that *iron may have no effect in an iron-deficiency anemia unless given with thyroid extract.* Iron utilization is interfered with by hypometabolism.

An excess of carbohydrate food interferes with utilization of vitamin B. Vitamin B deficiency may be brought on by a high-carbohydrate diet (the great American bread, sugar and potato habit).—R. L. HADEN, M.D., in *Am. J. Dig. Dis. & Nutr.*, Feb., 1938.

Dietary Deficiencies Due to Special Diets

DIETS FOR gastric and duodenal ulcer cases are usually very deficient in vitamin C, and are often low in caloric value. Concentrated fluid feedings should be given (cream, olive oil, malted milk). Vitamin C may be added, in the form of cevitamic acid tablets or neutralized tomato juice.

Low-residue diets are liable to be deficient in vitamin B. The addition of brewers yeast tablets or whole wheat products will tend to prevent such deficiency.

A low-carbohydrate diet should not be prescribed routinely for glycosuria, as the condition may not be the result of diabetes. Mild forms of hyperthyroidism may result in glycosuria, and in such cases the restriction of high-calorie foods seriously impairs the patient's recovery.

Do not give thyroid extract for reducing purposes except to: (1) those patients who are definitely hypothyroid; (2) women at the menopause; (3) those patients who feel perfectly well while under small doses of the extract. Many obese subjects have a slightly raised metabolism, so that thyroid extract will throw more work on the heart, while the patient will remain fat and feel ill. The diet should be made up of lean meat, fruit, and green vegetables, with only enough sugar, starch, and fat to prevent feelings of weakness or hunger. In putting patients on such a diet, make the change slowly.

LESLIE COLE, M.D., F.R.C.P.
Cambridge, Eng.

Br. M. J., Jan. 23, 1938.

Diagnosing Gastro-Intestinal Lesions

DISSOLVE a "pinch" (probably from 2 to 5 grains—ED.) of phenolphthalein in ⅓ ounce (10 cc.) of alcohol and dilute with ⅔ ounce (20 cc.) of water, and give it to the patient on an empty stomach. If there is any erosion of the gastro-intestinal mucosa, the dye will promptly pass through it into the blood and can be detected in the urine (pink color on adding a few drops of sodium hydroxide solution) in from 2 to 6 hours, the rapidity depending, *perhaps*, on the location of the lesion. By giving carefully measured quantities of the dye, and testing for it *quantitatively* in the urine, it may be possible to estimate the size of the lesion.—EDWARD E. WOLDMAN, M.D., of Cleveland, O., reported in *Time*, June 27, 1938.

[The scientific editorial staff of *Time* is so competent that its reports may be accepted as trustworthy. This test is simple, harmless, and would appear to be worth trying and reporting the results.—ED.]

Diagnosing Cancer

THE TIME is not far off when the staff of each medical school will think it essential to have a department of neoplastic diseases and maintain a tumor clinic, so that graduates will know that a pain in a bone is not necessarily osteomyelitis, "growing pains," or rheumatism; that a lump in the neck could have its origin in the abdomen; that cancer of the cervix is seldom, if ever, to be treated by surgery; and that a lesion in the mouth should be considered cancer until proved otherwise.

The general practitioner can see more cases of tumors in several attendances at a tumor clinic than in as many years of practice.—D. V. TRUEBLOOD, M.D., F.A.C.S., in *W.J.S.G.O.*, Mar., 1938.

Pyuria*

PYURIA is a pathologic condition in which the number of leukocytes in a centrifuged specimen of urine exceeds 10 to the high-power field. This is a working definition and is satisfactory for all practical purposes. Arbitrarily, we may further classify the findings:

0- 10	per	high-power	field,	normal	
10- 20	"	"	"	"	, 1 plus
20- 50	"	"	"	"	, 2 "
50-100	"	"	"	"	, 3 "
100 plus	"	"	"	"	, 4 "

The occurrence of leukocytes in clumps is of significance and should be reported, if present.

Collection of the urine. For microscopic examination of the urine it is advisable to have as fresh a specimen as possible. If it has been standing too long, certain alterations, due to change of temperature, absorption of gases, and bacterial decomposition, may take place so as to alter the true microscopic picture.

In the male: (1) Clean the external meatus with a little boric acid solution on a piece of cotton; (2) Have the patient void a small amount, in order to wash out any debris in the urethra, and discard it; (3) Have him void the remainder in a sterile container.

In the female: A sterile specimen must be obtained in order to get a true picture. There is only one way, and that is by catheterization under aseptic technic. The socalled catheterization cystitis does not exist and will not exist if the technic is not broken. The impossibility of collecting uncontaminated urine from the female in any other way is self-evident.

Examination of the urine. Do not be misled when looking at the collected specimens with the naked eye. An apparently crystal clear urine may contain a considerable number of casts, leukocytes, or hemolyzed red blood cells; whereas an intensely turbid, almost viscid urine may not contain a single element of medical importance. It may be simply highly concentrated urine, in which various urates or phosphates have been precipitated.

The specimen is centrifuged at moderate speed for at least five minutes, and a drop of sediment, on a slide under a coverglass, is examined under high-power objective and the count per field made. On another slide a Gram-stained preparation may be made of the sediment. This is of inestimable value in determining the type of infecting organism, if one is present. Sediment may also be cultured or inoculated in a guinea pig, if desired.

Significance of the findings. The presence of leukocytes above the normal number in the urine indicates an inflammatory lesion somewhere in the urinary tract. It may be anything from a simple irritation to ulceration or abscess formation. The problem now is to locate the source.

It will be noted that we have not mentioned the urethra. A simple two-glass test will show whether or not the pus is of urethral origin. Cystoscopy and ureteral catheterization are necessary to determine whether the pus is coming from the bladder, ureters, or kidneys. Remember that the infection is in the urogenital tract except in those cases where an abscess ruptures into the tract from some other viscus, and that this infection is often complicated by some other lesion, especially stone, neoplasm, or obstruction.

DRS. A. J. HOLM AND NORRIS J. HECKEL.
Chicago, Ill.

Bul. George W. Green Medical Library of Ravenswood Hospital, Chicago, No. 4, 1937-38.

Principles of Treatment of Compound Fractures*

THE PATIENT with a compound fracture should receive: (1) 1500 units of tetanus antitoxin; (2) intravenous injections of saline or dextrose solution and morphine, if shock is present; (3) an accurate x-ray diagnosis, *after* shock is passed; (4) as little anesthetic as possible, for the reduction, which is carried out in the operating room.

The limb is washed with soap and water, grease is removed with benzine, and the hair is shaved off, during which procedure the wound remains covered with sterile gauze.

With a sharp scalpel, approximately one inch of tissue is removed from the margins of the wound. Instruments and gloves are then changed and a careful search is made for additional lacerated tissue, which is excised. Muscle tissue must be removed until it is red, bleeds on cutting, and contracts when pinched. Small, detached bony fragments are removed, while larger detached

Am. J. Surg., Dec., 1937

fragments and those attached by periosteal strips should be left. Dirty bone ends may have to be cut away with a rongeur until the clean bone is reached, being careful not to sacrifice too much bone, with a resultant gap. Small puncture wounds should be explored, to make sure that no foreign bodies have been forced in, or drawn in by the bone ends.

GEZA DETAKATS, M.D., F.A.C.S.
Chicago, Ill.

Intradermal Test for Vitamin C Deficiency

DICHLORPHENOLINDOPHENOL 2:6 may be used to gage the amount of vitamin C deficiency in the human being. This dye is injected into the skin of the forearm, in an area free from hair and small veins (because the latter are the same color as the dye), which has been cleaned with ether. One-hundredth (0.01) cc. of the solution is injected immediately under the epithelium into the skin. The times of injection and complete disappearance of the dye are noted. A decolorization time of less than five minutes indicates tissue saturation with vitamin C, while ten minutes or longer is evidence of vitamin C deficiency. — B. PORTNOY, M.D., and J. F. WILKINSON, M.D., F.R.C.P., in *Br. M. J.*, Feb. 12, 1938.

The Diagnostic Importance of Venous Pressure*

VENOUS PRESSURE may now be taken by a simple apparatus which may be used in the patient's home. Normally the venous pressure stabilizes in the region of 60 to 80 mm. of water, with an occasional upper limit of 110 mm. The highest pressures (200 to 350) are found in cases of *decompensated heart disease;* the next highest in *pericarditis* (180 to 210 mm.) and in *bronchial asthma* (154 to 172 mm.).

Pericarditis can be very definitely suspected if there is an increase in venous pressure during the course of an acute infectious process, such as pneumonia, if there is no evidence of cardiac failure. This may be *life-saving,* as pericarditis is frequently not thought of. After an injection of epinephrin, and relief of asthma, the venous pressure usually fell 50 mm.

Venous pressure is important: (1) as confirmatory evidence in suspected incipient cardiac failure; (2) in establishing the degree of cardiac participation in the production of edema or of ascites, especially in complex cases where the distribution of the edema is atypical; (3) in determining quickly the cause and orienting the treatment in acute respiratory distress (cardiac asthma, bronchial asthma, hysteria).

RUFUS D. MOORE, JR., M.D.
Little Rock, Ark.

*South. M. J., Oct., 1937.

Treatment of Muscle Pain*

PAIN ARISING from a muscle is always diffuse, is often referred, and is associated with referred tenderness of the deep structures. A number of cases of "myalgia" or "fibrositis" have been treated in accordance with this study.

The source of trouble is located by finding the *exquisitely tender area.* Referred tenderness is never marked, and I have found it a useful guide to consider tenderness referred unless the patient winces under palpation of a given spot. When these *acutely tender spots are not too extensive, they are infiltrated with 1-percent Novocain* (procaine) *solution, which relieves pain,* or may abolish all signs and symptoms, including pain, limitation of motion, and tenderness. At the moment of injection, there may be a temporary exacerbation of pain.

The relief of pain may be permanent. In a patient with lumbago, for example, tender areas were found in the erector spinae muscles. These areas were infiltrated with 30 cc. of Novocain. The pain was then abolished and he could move about painlessly. There was no return of the lumbago. The same procedure was carried out in cases of shoulder pain, pain in the foot, pain in the hip, et cetera. The tender spots were injected with Novocain solution, using up to 70 cc.

J. H. KELLGREN, F.R.C.S.
London, Eng.

Prevention of Intracranial Injury during Delivery

PREMATURE LABOR should not be induced, in the presence of resistant soft parts and a borderline pelvis, in order to deliver a small fetus. An induced labor is frequently prolonged and the premature infant often sustains injuries during the process.

Do not encourage the mother to voluntary efforts to overcome resistant soft parts; rather, perform a fairly deep episiotomy

*Br. M. J., Feb. 12, 1938.

and deliver with low forceps, preferably of the Simpson type. *Do not restrain the premature fetal head* by manual pressure in order to avoid a precipitate delivery or because a physician is not present. In the premature infant, such efforts may result in intracranial injury.—W. E. STUDDIFORD, M.D., and H. P. SALTER, M.D., in *Am. J. Obst. & Gynec.*, Feb., 1938.

Sex Instruction

FOR TWENTY YEARS I have been delivering lectures or, as I prefer to call them, intimate talks on sex subjects, to soldiers, university and college students, and to the ordinary populace.

I have given these talks under many and varied auspices. I prefer now to deliver them entirely on my own. One finds oneself much more able to talk freely and much more efficient in answering a barage of intimate, necessary questions.

During the past year I have given my lectures to women only. The members of my audiences have confessed to ages from eighteen to sixty-five years, and have come from all sections of our large city, many of them from a distance of ten miles, and from all classes of society. The women before me, week after week, have been a fairly typical cross-section of female human-kind.

Throughout the season I gave three courses with not less than 100 nor more than 150 in the audience. For teaching purposes I do not desire more than 150. Probably 400 women attended, of whom 352 registered.

My course consists of six lectures, one talk each week, following this outline:

Lecture 1.—"The Human Sex Organs, their Formation and Functions." (This introductory talk is very important.)

Lecture 2.—"Fecundation; Development of the Human Fetus; Mechanism of the Birth of a Human Being."

Lecture 3.—"The Meaning of Sex. Sex and Life. Sex and the Senses. The 'Double Standard.' Dancing. Social Hygiene."

Lecture 4.—"Heredity. Eugenics. Love. Marriage. Motherhood. Birth Control. Fear."

Lecture 5.—"The Sex Instinct. Sex Perversions. Illegitimacy. Prostitution. Venereal Disease."

Lecture 6.—"Sexual Lies. Sex and Religion. Morality. How to advise Girls of from 15 to 17 years. Extent of Sexual Desire." Questions. Answers.

At the conclusion of the fifth lecture, I have been in the habit of asking ten questions, to be answered anonymously by "Yes" or "No." At the sixth lecture the women hear the results.

Question 1.—Should the unmarried be taught all the facts about sex?

Question 2.—Should there be complete sexual relations before marriage?

Question 3.—Should there be partial participation in sex before marriage?

Question 4.—Does intimate premarital experience help make marriage more successful?

Question 5.—Have you experienced a real orgasm?

Question 6.—Have you ever practiced masturbation, self-abuse, auto-erotism?

Question 7.—Do you think it harmful, when your whole being craves it, to satisfy desire by self-indulgence (if not to excess)?

Question 8.—Have you been fully satisfied sexually?

Question 9.—Would you like to have a child?

Question 10.—Do you believe that a man and woman, immediately before marriage, should consult a sympathetic and capable physician to secure a complete knowledge of their sex life and have a physical examination?

CHART I.

Question No.	Yes	No	No Answer or Equivocal
1	306	8	0
2	35	276	3
3	122	182	10
4	121	178	15
5	147	150	17
6	71	235	8
7	91	186	37
8	115	177	22
9	271	30	13
10	308	3	3

There was a splendid response, 314 persons participating.* I have tabulated the answers received during the season 1937-1938, in Chart I.

Next season I shall probably make some changes in the questions, and shall be very grateful if any of my readers will send me suggestions.

OSWALD C. J. WITHROW, M.B., M.R.C.S., L.R.C.P.
Toronto, Ont., Can.
38 Albany Ave.

State Medicine is poorhouse medicine. Tell your patients.

*Of the 314 women reported upon in this chart, 126 were married, and 188 unmarried.

Symptomless Pulmonary Tuberculosis*

THERE ARE A CERTAIN NUMBER of cases of tuberculosis which do not present any symptoms of the disease. For example, one of these symptoms was the first to be complained of by persons apparently in good health (and proved by x-ray examination to have tuberculosis): (1) Sharp pain in the chest; (2) "flu"; (3) fatigue; (4) pinkish expectoration; (5) rectal abscess; (6) pleural effusion; (7) "bronchitis"; (8) "*cigarette cough*" (a common mistake in diagnosis).

Many cases are found in routine examinations (as in physicians who are beginning hospital work, or employees shifted to different departments or beginning work in a new institution) of persons who present *no signs or symptoms* and are judged to be in perfect health until the roentgenograms are taken.

Strenuous physical exertion often brings on a cough, expectoration, or pleuritic chest pain, and thus calls attention to the lung tuberculosis. A number of cases present digestive complaints.

CHARLES HARTWELL COCKE, M.D., F.A.C.P.

Asheville, N. C.

Diagnosis of Addison's Disease

ADDISON'S DISEASE may be diagnosed by the appearance of an acute exacerbation of the disease following the administration of a salt-free diet to the patient. A less dangerous method is to administer a diet containing 0.95 Gm. of chloride ion, 0.59 Gm. of sodium, and 4.1 Gm. of potassium, and examine the urine and blood for sodium, chloride, and potassium content. *If the concentration of chloride in the urine exceeds 225 mg. percent on the third morning of the test, Addison's disease or adrenal insufficiency is strongly suggested.*—R. M. WILDER, M.D., *et al*, in *Staff Meet. Mayo Clin.*, April 20, 1938.

Autoserotherapy in Gonorrheal Arthritis

THE INJECTION if 1 or 2 cc. of the patient's blood serum, every other day, resulted in startling improvement in 15 cases of gonorrheal arthritis. The serum is separated from the blood, kept in an incubator for a week, inactivated by a temperature of 60° C. for one hour, and then stored in a refrigerator. Patients admitted to the hospital were frequently bedridden. After from 10 to 20 days of treatment, the joints were usable and without pain. The urethritis often responded at the same time.—ALBERT GOLDEY, M.D., in *Urol. & Cutan. Rev.*, Aug., 1937.

[Immediate intramuscular injections of the patient's whole blood are much simpler, and have been known to produce good results.—ED.]

Severity of Hyperthyroidism

TACHYCARDIA is the best single evidence of the existing degree of hyperthyroidism. Experience shows that when the tachycardia does not yield to the usual preoperative measures, there will be, in that case, danger of a postoperative hyperthyroid crisis. Single lobectomy or a ligation of the thyroid arteries should be done first, and the thyroidectomy completed at a later date.

Rapid loss of weight indicates severe hyperthyroidism, and is most unfavorable for any operative procedure. Mental instability and excessive emotionalism are dangerous signs. *The basal metabolism test does not indicate accurately the toxicity or damage done to organs*, especially the heart and liver, in prolonged hyperthyroidism.—W. P. KROGER, M.D., and C. G. TOLAND, M.D., in *West. J. Surg.*, June, 1937.

Safer Cholecystostomy

THROUGH A RELATIVELY SHORT INCISION, the gallbladder is exteriorized, but not opened at once. If the large gallbladder is mobile and the patient not too obese, the viscus is simply tilted out through the incision, which is closed around it without other drainage. If the gallbladder cannot readily be exteriorized, a large glass tube from 4 to 6 centimeters in diameter and with a rounded lower border, is placed against the gallbladder, to which it is anchored with fine wire or silk sutures brought out through holes in the tube edge. The wound is then closed about the tube.

After 48 hours (while protective adhesions are forming), the gallbladder is vented by burning a large button from its exposed wall with a fine cautery point. Two or three days later, the calculi are removed with a scoop and forceps, and after the fifth day, the tube is removed. *There has been no mortality with this technic.* The patient has prompt relief, despite the exposure of the

*South. M. J., Jan., 1938.

tense gallbladder and the presence of the large tube.—WAYNE BABCOCK, M.D., in *Rev. Gastroent.*, Dec., 1937.

Diagnosis of Urticaria

OFTEN A DIAGNOSIS of the cause of urticaria can be made by use of a food diary on the elimination diet system. The food diary consists of a cross-ruled sheet of paper, the foods being written on the left margin, and the dates on the top margin. Thus the patient need only make an X in front of each food under the line for the day in which it was consumed. If an attack of hives (or asthma) occurs on a certain day, that day should be checked and attention drawn to the foods marked for the preceding twenty-four hours. This procedure is simple and inexpensive; it will give results in some cases that are negative to skin tests with food extracts.—K. P. TURRENTINE, M.D., in *South. Med. & Surg.*, Oct., 1937.

Fractures in Which Skeletal Traction Is Indicated

SKELETAL TRACTION is indicated in the following conditions: (1) Recent or infected open fractures; (2) neglected fractures, with resultant overriding, angulation, or shortening, which may have been in plaster of Paris casts; (3) the presence of blebs or abrasions at or near the fracture site, which forbid skin traction; (4) large hematoma within the limb; (5) failure of manipulation or skin traction to obtain reduction within a reasonable time; (6) double or multiple fracture of a long bone; (7) as an excellent substitute for a major open operation, where the surrounding conditions are unfavorable for surgical procedure.—KELLOGG SPEED, M.D., in *Am. J. Surg.*, Dec., 1937.

The Use of Progestin*

THE CHIEF hormones of the ovary are the estrogenic hormone and progestin. The former is derived from the follicular fluid and the latter from the corpus luteum.

The corpus luteum is essential for the continuation of pregnancy. Injections of progestin inhibit the uterine contractions which follow pituitrin injections.

Premature delivery may be prevented, as may abortion (in a number of women who have habitually aborted), by injections of progestin throughout the pregnancy.

Progestin may also be used in those patients whose normally-implanted placenta is prematurely separating and whose baby is yet alive. If the baby is dead, pituitrin should be used, in the interests of the mother.

It is suggested that the use of progestin may enable the mother to be carried over the last month or two of pregnancy, despite a placenta previa, if pains and cervical dilatation have not occurred.

If fibroid tumors are present in the uterus, the mother should be guarded against abortion; injections of progestin may be necessary to control irritability of the uterine muscle. This medication may also be used under these circumstances: (1) Great psychic shock; (2) a necessary trip; (3) pregnancy complicated by the high fever of pyelitis, streptococcus infections, or contagious diseases, to prevent the onset of premature labor.

Dosage: As a prophylactic, ½ to 1 unit twice a week; in treatment, one (rabbit) unit twice daily. The injection should be made deep into the thigh muscles. The progestin *must be fresh, as it deteriorates rapidly.*

FREDERICK H. FALLS, M.D.
Chicago, Ill.

*South. M. J., May, 1938.

Postural Treatment of Colic

THE COLIC of infants before the age of three months is usually accompanied by considerable gas in the small intestine. I placed such infants in the semi-inclined, right lateral and abdominal positions, so that the gas would rise to the cardiac end of the stomach, and found that the colic did not return.

Fifty infants were examined roentgenologically in the recumbent position during the first week of life, and half of this number showed gas in the small intestine. Twenty-five were then placed in a semi-inclined position, so that the esophagus was on a higher plane than the pylorus, and in 22 the gas in the small intestine disappeared.—WILLIAM SNOW, M.D., in *Am. J. Roentgen. & Rad. Ther.*, Nov. 1937.

Diagnostic Pointers

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Psychoneuroses Associated with Posterior Urethral Pathoses

IMPOTENCE, premature ejaculations, loss of sexual desire, "morning drop," nervousness, restlessness, irritability, melancholia, and even despondency were complained of by a group of patients who presented enlarged, "cauliflower" verumontanums, and soft, enlarged prostates. Treatment, consisting of the application of 20-percent silver nitrate to the verumontanum once weekly, or posterior instillations of one-percent protargol, and prostatic massage once or twice weekly, was very successful in restoring a normal sex life and happy mental attitude.—GEO. E. SHIELDS, M.D., in *Urol. & Cut. Rev.*, Nov., 1937.

Rectal Examination for Constipated Children

EVERY CHILD OR BABY who is constipated should have a rectal examination to rule out a stricture or rectal stenosis. The little finger is the best dilator we have for such conditions.—C. H. WEBB, M.D., in *N. O. M. & S. J.*, Feb., 1938.

Senile Osteoporosis

THE GENERAL PRACTITIONER does not recognize cases of senile osteoporosis so frequently as he should. The picture of an older person developing a severe "round" back (or dorsal kyphosis) and gradually losing height is too often accepted as old-age changes. The fact that the patient may have severe localized pain in the back is not considered or studied sufficiently.—JOSEPH A. FREIBERG, M.D., in *J. A. M. A.*, Dec. 25, 1937.

Congenital Syphilis Is a Preventable Disease

FROM THE therapeutic standpoint, fetal syphilis and the syphilis of infancy and childhood are preventable diseases. The routine use of the Wassermann test and consequent early diagnosis is the first step to be made in the elimination of this disease. Antisyphilitic treatment must be begun at once.

Untreated pregnant women, if syphilitic, will give birth to syphilitic children four times out of five. Such babies have a 50 percent mortality rate in the first ten days of life, including the trauma of birth. One-fifth of the remainder will die before treatment can be well begun.—N. R. INGRAHAM, JR., M.D., in *Vener. Dis. Inf.*, May, 1938.

Appendicitis in Infants

APPENDICITIS in infants is a rare condition, but not so rare as reported, because some cases are overlooked. *Diarrhea*, vomiting, constipation, leukocytosis, and irritability are often found. One sign that was of value in diagnosing appendicitis in an 8-months infant was the flexion of the right thigh when the abdomen was palpated.—P. A. MCCARTHY, M.D., and J. L. MAGRATH, M.D., in *Penn. M. J.*, Oct., 1937.

When Not to Perform Gastroenterostomy

THE SURGEON who performs a gastroenterostomy on a young subject with high acidity, an open pylorus, and a negative stomach retention, is courting the disaster of a marginal ulcer, with its manifold locations and sequelae. A gastroenterostomy recurrence leads to a severe operation, entailing high mortality.—D. PHILIP MACGUIRE, M.D., in *Med. Rec.*, Nov. 3, 1937.

Symptoms of Rectal Cancer

THE SYMPTOMS of cancer of the rectum may be thought of in respect to the initiating pathology. The first symptom is usually blood; then blood and mucus; with greater involvement by pressure or extension, pain; and lastly, when the growth is obstructing or causing bowel dysfunction, constipation and diarrhea, which may be alternating. A review of 200 cases, by Bargen and Leddy, showed the symptoms occurring in that order. Dixon and Stevens state that bleeding occurs in 85 percent of

all cases. We should be interested in the early symptoms if we are to have early findings.—CHARLES E. POPE, M.D., F.A.C.S., in *Med. World*, May, 1938.

Exophthalmos Due to Scurvy

EXOPHTHALMOS may be caused by an orbital hemorrhage due to scurvy. It is nonpulsating, irreducible, and pressure on the eyeball in an attempt to reduce the protrusion causes great pain. The treatment is an anti-scorbutic diet (oranges, tomatoes, lemons, etc.), with vitamin C by injection, if necessary.—L. H. LANIER, M.D., in *E. E. N. T. Monthly*, Oct., 1937.

Acute Dyspnea in Children

THE ACUTE ONSET of cough and dyspnea, with moderate fever, in a child between the ages of 2 and 7 years, should suggest acute laryngobronchitis. It is usually streptococcal in origin, has a mortality of between 10 and 50 percent, and should be treated by tracheotomy before cyanosis appears. It often results in thick, gummy secretion, which must be removed from the trachea, by the aid of bronchoscopy, if necessary.—M. P. SPEARMAN, M.D., in *Southwest. Med.*, May, 1937.

Prevention of Silicosis

TINY TRACES OF ALUMINUM DUST, added to the already dusty, silica-filled air breathed by certain classes of miners, may some day stay the ravages of this dread disease. Rabbits dusted with quartz to which less than one percent of metallic aluminum dust had been added, showed practically no fibrosis, while control rabbits, dusted with quartz alone, showed well-developed silicosis.—W. D. ROBSON, M.D., and D. A. IRWIN, M.D., in *Canad. M. A. J.*, July, 1937.

Spinal Dislocation

A TRUE DISLOCATION of the spine can occur only in the cervical region, as the oblique and vertical direction of the articular processes in the dorsal and lumbar regions, respectively, do not permit dislocation without fracture.—"A Short Practice of Surgery" (H. K. Lewis), by H. BAILEY and R. J. LOVE.

Breast Cancer

There are no pathognomonic signs or symptoms by which all mammary malignant growths can be recognized. If a diagnosis is deferred until malignancy can be definitely established clinically, fewer patients will live. Any lump in the breast should be removed for microscopic examination, regardless of the age of the patient, as I have seen breast carcinoma as early as seventeen years of age and as late as seventy-nine years.—S. W. HARRINGTON, M.D., in *Minn. Med.*, Jan., 1938.

Convulsions As the Earliest Symptom of Brain Tumor

A CONVULSION may precede all other signs and symptoms of brain tumor by many months, and often years. *Every adult patient who has a convulsion* (without a syphilitic basis) *should be considered as having a brain tumor until the contrary is proved.* In 20 percent of my series of tumors, a convulsion was the first symptom.—ERNEST SACHS, M.D., in *N.O.M. & S.J.*, December, 1937.

Lipoma

A SUPERFICIAL TUMOR that is *lobulated*, rounded in outline, non-tender, soft, and located on the shoulders, back, neck, or buttocks, is *probably* a lipoma, the most innocent example of tumor known. It can be differentiated from a collection of fluid in that it possesses a very definite margin, which can be felt through the skin.—WILLIAM BOYD, M.D., in "Surgical Pathology" (Saunders).

Failure to Diagnose Tuberculosis

IN SURVEYING A GROUP of tuberculous patients, it was found that fever and night sweats were rare early symptoms and that cough and expectoration were frequently the most conspicuous. "Nervousness," "overwork," "overindulgence in alcohol or tobacco," and "anemia" were the most common mistaken general diagnoses; "chronic bronchitis" and "sinusitis" the most common local diagnoses.—L. A. MONTE, M.D., and OSCAR BLITZ, M.D., in *New Orleans M. & S. J.*, Feb., 1938.

Thumbnail Therapeutics

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Measles

THE MORBIDITY AND MORTALITY of measles is surprisingly high. Ninety percent of the deaths following measles occur in children under the age of five. Convalescent serum or placental extract will prevent, modify, or fail in effect, according to the time in the incubation period when they are given. —E. S. KING, M.D., in *J. Ind. S. M. A.*, Feb., 1938.

First Aid for Fractures and Dislocations of the Cervical Spine

IN CASES OF FRACTURE OR DISLOCATION of the cervical spine, pillows or sandbags should be packed tightly between the head and shoulders to fill the angle. *A small, firm pad or pillow* MUST *be placed under the middle of the neck* (mid-cervical region) to sustain the natural cervical curve. In the presence of tearing of the tissues about the spine, a drooping cervical curve will cause distress, and may crush the spinal cord by pressure of the sagging odontoid process.—T. P. BROOKES, M.D., in *Rad. Rev. & M. V. M. J.*, Jan., 1938.

Sylnasol in Hydrocele

BY INJECTING 0.5 cc. of Sylnasol for every 25 cc. of fluid removed from a hydrocele, a cure may be obtained without pain and with little expense. Daily light massage may be made by the patient, to insure distribution of the fluid throughout the tunica vaginalis. —MARTIN BIEDERMAN, M.D., in *Med. Rec.*, Jan. 19, 1938.

Treatment of Purpuras

BLOOD TRANSFUSION should be the first procedure in treating purpura. The administration of large amounts of calcium and viosterol is occasionally of value. Recently, very encouraging results have followed the administration of parathyroid extract (40 units) and 10 cc. of calcium gluconate intramuscularly, followed by 40 units for two successive days and 80 grains of calcium gluconate by mouth for two weeks. Splenectomy is still the operative method of choice, and usually gives a permanent cure.—MARION AINSWORTH, M.D., in *Ohio S. M. J.*, Aug., 1937.

Vitamins in Nervous Diseases

A GROUP of different nervous system diseases (alcoholic neuritis and psychosis, myelitis which may resemble tabes, puerperal polyneuritis, toxic psychosis, idiopathic polyneuritis, pellagra) responds much more dramatically to high-vitamin diet than to any previous treatment. In some cases, liver extract injections are also given.—ERWIN WEXBERG, M.D., in *New Orleans M. & S. J.*, Aug., 1937.

Strychnine and Whiskey

A COMBINATION of strychnine and corn whiskey is a *deadly poison*, even in relatively small quantities. Persons who take strychnine should not drink whiskey, and whiskey drinkers should not take strychnine.—DR. JACK C. NORRIS, Atlanta, Ga., quoted in *Science News Letter*, June 19, 1937.

Tryparsamide and Optic Nerve Atrophy

A CAREFUL REEXAMINATION of 52 patients who had been treated for neurosyphilis with Tryparsamide, after a period of five years, indicates that the widespread hesitancy in using this drug, which has resulted from reports that optic nerve atrophy frequently follows such medication, has no sound basis in fact.—LEO L. MAYER, M.D., Chicago, Ill.

Viosterol in Muscular Dystrophy

IN CASES of progressive muscular dystrophy, partial or complete remissions have been the rule in patients treated with viosterol or halibut-liver oil with viosterol, in doses of from 6 to 30 minims (0.4 to 2 cc.) daily average 9 minims (0.5 cc.)—along with restriction of activity, daily massage, and in some cases calcium lactate. Objective im-

provement is not seen for at least 3 months, and treatment should be continued for at least a year.—DANIEL V. CONWELL, M.D., Halstead, Kans.

Histamine in Pruritus Ani

OUT OF 95 cases of pruritus ani, 88 (92.6%) were relieved (apparently cured) by *intradermal* injections of a 1:2,000 aqueous solution of histamine dihydrochloride. Injections are made, after scrupulous disinfection of the peri-anal skin, about 2 cc. from the anal verge at the points of greatest itching, or, if these are not localized, at from 3 to 6 punctures in a ring. *Repeat the injections daily until the itching disappears.* Redness, edema, and sometimes sharp, burning pain follow the injections for a short time.—A. CAINE, M.D., in *Presse Medicale*, Nov. 3, 1937.

Nitroglycerin in Vomiting of Pregnancy

TWELVE (12) pregnant women, having rather severe morning sickness, were relieved by placing 1/100 grain (0.64 mg.) of nitroglycerin under the tongue about 10 minutes *before* meals, for varying periods of time. Some of them had a slight headache for a few minutes after taking the drug.—J. M. MCGOWAN, M.D., *et al*, in *J.A.M.A.*, Feb. 12, 1938.

Pituitrin in Herpes Zoster

IN 2 CASES OF HERPES ZOSTER involving branches of the trigeminal nerve, in which the pain was excruciating, it was relieved in a few minutes after injecting 1 cc. of *surgical* (double-strength) pituitrin, and did not return for 24 hours, when the injection was repeated (in one case, 5 daily injections were given). Reactions, such as vomiting or urgent defecation, may occur.—S. H. PORTONY, M.D., in *J. of Med.*, Feb., 1938.

Protamine Zinc Insulin

IN CHANGING the dose of protamine zinc insulin, it must always be remembered that the full effect of the change does not become apparent until the end of the third day.—R. M. WILDER, M.D., in "A Primer For Diabetic Patients" (W. B. Saunders Co.).

Honey in Pruritus Vulvae

IF HONEY is applied liberally to the affected area in pruritus vulvae, the irritation usually subsides within a few days. Recurrences do occur, but usually not for several weeks, and can readily be controlled by further application of the honey. The soothing effect is due to dilatation followed by constriction of the superficial blood vessels.—R. S. RHONOF, M.D., in *Zeitschr. f. Gyn.*, Aug., 1937.

Autohemotherapy in Skin Diseases

AUTOHEMOTHERAPY is of value in urticaria, neurodermatitis, and eczema, whether of contact or metabolic origin. It is of some value in the treatment of psoriasis, erythema multiforme, herpes simplex, essential pruritus, and dermatitis herpetiformis.—FRED WISE, M.D., and JACK WOLF, M.D., in *Med. Rec.*, Oct. 20, 1937.

Puerperal Care

LYING ON THE BACK is the most unnatural posture to which the human race has become heir, through habit only. No other animal sleeps in such a position, and certainly no other female would dream of so abusing herself following labor. But our female almost invariably does, and the heavy, soft uterus, with the usual means of support, the pelvic floor, newly stretched, weakened and even injured, has no alternative but to gradually tumble back against the sacrum, with resultant *retroversion*.—W. D. PHILLIPS, M.D., in *New Orl. M. & S. J.*, Oct., 1937.

Chronic Fatigue

IN PATIENTS without demonstrable organic disease, whose chief complaint was chronic exhaustion and lack of energy, Benzedrine Sulfate, in appropriate doses (10 to 30 mg.), as required, improved the symptoms markedly in 80 percent of the cases.—M. H. NATHANSON, M.D., in *J. A. M. A.*, 108:528, 1937.

Treatment of Pertussis

I INJECT from 3 to 7 minims of adrenal cortex extract subcutaneously, every other day for four doses, and the pertussis disappears.—A. F. BURKARD, M.D., in *Med. World*, Oct., 1937.

THE DOCTOR'S STUDY

New Books

Any book reviewed in these columns will be procured for our readers if the order, addressed to CLINICAL MEDICINE AND SURGERY, Waukegan, Ill., is accompanied by a check for the published price of the book.

Blessed art, that makes books and thus joins me to a stranger by this perfect railroad.—EMERSON.

Bailey: Emergency Surgery

EMERGENCY SURGERY. *By Hamilton Bailey, F.R.C.S. (Eng.), Surgeon, Royal Northern Hospital, London; Surgeon and Urologist, Essex County Hospital; Surgeon, Italian Hospital; Consulting Surgeon, Clacton Hospital; External Examiner in Surgery, University of Bristol; Late Surgeon, Dudley Road Hospital; Assistant Surgeon, Liverpool Royal Infirmary; Surgical Registrar, London Hospital. Third Edition. 816 Illustrations, Many in Color. Baltimore: William Wood and Company. 1938. Price, $14.00.*

As I am a Bailey admirer, my review may be prejudiced in his favor. I enjoy his frank discussions of the care of surgical patients and his admission that he has failed to cure certain of them. *A surgeon or physician who does not analyze his failures is a dangerous man* to have charge of a person's health and life.

This large volume is presented with the idea that it would be a sufficient guide for any surgery that need be carried out in an emergency, no matter how far the surgeon may be removed from medical centers. After carefully perusing the book, it would seem to have fulfilled its mission.

Surgical emergencies which occur in every part of the body are discussed and treatment is outlined. Hundreds of illustrations are used to clarify points of technic. The colored illustrations are very life-like and instructive.

Many of the surgical pointers are of value in every-day general practice (the unroofing of ischiorectal abscesses to prevent the formation of fistula; the careful search for the base of the appendix so that an appendectomy will remove *all* of the organ; entrance to the common duct by way of slitting the gallbladder and cystic duct; incisions for hand infections).

It is to be regretted that Handley's operation for generalized peritonitis (cecostomy plus jejunocolostomy) is not mentioned in connection with the management of acute appendicitis. Heyd has just reported a small series of cases which were treated by this life-saving procedure. Cecostomy through the base of the appendix might also be mentioned.

R. L. G.

Schlanser: Practical Ear, Nose, and Throat Treatment

PRACTICAL OTOLOGY, RHINOLOGY AND LARYNGOLOGY. *By Adam Edward Schlanser, M.D., F.A.C.S., Colonel, Medical Corps, United States Army; Chief of the Eye, Ear, Nose, and Throat Service, Letterman General Hospital, San Francisco, Calif.; Former Director of the Department of Ophthalmology and Otorhinolaryngology, Army Medical School; and Chief of the Eye, Ear, Nose, and Throat Section, Walter Reed General Hospital, Washington, D. C.; etc. Illustrated with 81 Engravings. Philadelphia: Lea & Febiger. 1938. Price, $4.50.*

The underlying purpose of this volume is to show how each of the complaints that are of routine occurrence in otorhinolaryngological practice may be handled expeditiously and successfully. To this end the book has been made distinctly clinical and its instructions may be followed with certainty, confidence, and ease. Unessentials have been rigorously excluded and the pathology of the various disorders has been limited to the essentials requisite to a clear conception. The result is a work that is unusually practical and useful.

This book furnishes to the general practitioner a readily available medium of refer-

ence, advice, and information, with its subject matter restricted to material of real value. The special complications which the practitioner is likely to encounter are all included, as well as the commoner difficulties. Both the arrangement of the subject matter and the practical way in which each topic is presented will appeal to those in search of clinical facts rather than theories.

Henry: Essentials of Psychiatry

ESSENTIALS OF PSYCHIATRY. *By George W. Henry, M.D., Associate Professor of Psychiatry, Cornell University Medical College, New York; Attending Psychiatrist, The New York Hospital. With an Introduction by C. M. Campbell, M.D., Professor of Psychiatry, Harvard University. Baltimore: Williams and Wilkins Company. 1938. Price, $5.00.*

The psychoneurotic is no longer dismissed as a weakling, but receives systematic study and treatment. The medical student no longer looks for his psychiatric material exclusively in the mental disease hospital; he finds it in general hospitals, in his office, in the schools. Instead of waiting for a fully developed psychosis to appear, the present-day physician attempts to treat personality disorders while they are yet minor.

Dr. Henry has presented the individualistic type of approach which is now dominating psychiatry, just as physiology and biochemistry now dominate medical thought instead of pathology.

At the same time, he has preserved the older generalizations to serve as a framework, so that his writings may be logically considered as an extension and expansion, rather than as an entirely new approach.

The general practitioner of the future must be able to recognize disease in its incipiency. The prevention of mental diseases will mean the saving of thousands of useful lives from the "living death" of dementia precox and the other psychoses. Every day the offices of all general clinicians contain at least one psychoneurotic, who can be helped by the application of the information contained in this very useful volume.

New International Clinics

THE NEW INTERNATIONAL CLINICS. *Edited by George Morris Piersol, M.D., Professor of Medicine, Graduate School of Medicine, University of Pennsylvania, Philadelphia, Pa., with the Collaboration of a Number of Authorities. New Series 1; Volume 2 (Old 48th). Philadelphia: J. B. Lippincott Company. 1938. Price, $3.00.*

This volume of the *International Clinics* presents a varied and highly interesting medical diet. Professor Karsner discusses recent studies on that vitally important subject, hypertension, and includes Goldblatt's work on clamping of the renal artery. The Beck operation on the heart was performed by William Bates on two patients, one of whom was much improved and was able to become fairly active. The second patient suffered a perforation of the ventricle, which was repaired by a graft from the pectoralis major muscle, and died on the third postoperative day.

Isidore Cohen writes of a surgical clinic, comprising mixed tumor of the parotid, sarcoma of the chest wall, and retroperitoneal tumor. *Manipulation* is given its due by Horace Gray, professor of medicine at Stanford, who reports on the work being done in England by orthopedic surgeons who are using manipulation without an anesthetic. The wider use of this method will return this field to the medical practitioner from the grasp of the osteopath. Sacro-iliac sprains are markedly benefited by simple manipulations, which are illustrated.

The treatment of urinary infections with mandelic acid; undulant fever; *the foot in general practice;* and the treatment of acute infections by injections of charcoal, are among the other interesting clinics.

Perkins: Cause and Prevention of Disease

CAUSE AND PREVENTION OF DISEASE. *By William Harvey Perkins, M.D., Professor and Director of the Department of Preventive Medicine and Director of the Hutchinson Memorial Clinic, The Tulane University of Louisiana, New Orleans, Louisiana; etc. Philadelphia: Lea & Febiger. 1938. Price, $7.50.*

As the preventive point of view comes more and more to dominate the approach to medical service, the etiology of disease assumes a corresponding importance. The author holds that, since every disease must result from an ascertainable cause, the natural laws under which it operates can also be determined. In this work he has systematized what is known of the causes and origins of disease and has supplied, in a single volume, the material that embraces all that is required for an inclusive review of the etiologic factors of disease and ill health, clarifying and enlarging previous conceptions.

The author sums up his philosophy of the practice of preventive medicine in a single phrase: "To oppose or intercept a cause is to prevent or dissipate its effects." This book is a step towards putting this principle into immediate and practical effect wherever and whenever the causes of disease have been revealed. It contains not only the few current applications of preventive principles, but suggests other applications which may be accepted in the future. The various categorical causes of disease—inherited factors, the defects of nutritive elements, the poisons and intoxications which result from exogenous chemical agents—are listed and the specific defenses against them are indicated. Similarly, phy-

sical forces and energies, the processes and effects of invading organisms, and the psychobiologic and biosocial factors and their effects are all considered, with their corresponding defenses. The result is a well organized body of material which assembles and extends the preventive knowledge at present applied in medical practice, and will prove useful to every clinician.

Laignel-LaVastine and Molinery: French Medicine

FRENCH MEDICINE. *By M. Laignel-LaVastine, Professor in the Medical Faculty in Paris; Secretary General of the International Society of Medical History; and M. Raymond Molinery, Gold Medalist of the Academy of Medicine; Member of the French Society of Medical History. Translated by E. B. Krumbhaar, M.D., Professor of Pathology, University of Pennsylvania. New York: Paul B. Hoeber, Inc. Price, $2.50.*

The series of Clio Medica comprises a number of small volumes, each devoted to some phase of medical history. They are immensely interesting to the physician in his collateral reading, and of great value to the individual who wishes to find quickly the most important historical facts regarding the medicine of one country or of one specialty. Hitherto, these facts have been available only in ponderous tomes, and have not been grouped together so as to be available without much labor.

One enjoys reading of the wild life of medical students at the early University of Paris. Perhaps one may wish that one had lived in that bygone age when constipation was treated by the consumption of urine. Certainly one would not wish to attend a medical school which was in close proximity to a house of pleasure!

The remarks on the terrible fatalities resulting from the inadequate, poorly trained medical service available to the armies of France, even as late as the Great War, make us ponder our own preparedness.

Brenner: Pediatric Surgery

PEDIATRIC SURGERY. *By Edward C. Brenner, A.B., M.D., F.A.C.S., Associate Professor of Clinical Surgery, New York Post-Graduate Medical School, Columbia University; Associate Attending Surgeon and Chief of Clinic, Post-Graduate Hospital; Director of Surgery, Riker's Island Hospital; Director of Surgery, Detention Hospital; Attending Surgeon, Midtown Hospital. Philadelphia: Lea & Febiger. 1938. Price, $10.00.*

Of recent years much emphasis has been placed on the surgery of children's diseases, and several excellent volumes have appeared on this subject, but it is hard to see how anyone can subscribe to the belief that pediatric surgery should be established as a specialty.

The text of this volume is well planned, inasmuch as it is possible to find any desired subject within a half-minute and to locate any desired points on diagnosis and treatment. It emphasizes the conditions peculiar to infants and children, with special attention to diagnoses, indications for operations, surgical therapy, and the end-results. The essentials of pre- and post-operative treatment are included in full detail, as well as discussion of operative technic.

Several specialists have assisted in the preparation of this work, notably Dr. Unger (blood transfusions), Dr. Buchanan (anesthesia), Dr. Vaughan (cleft lip and palate), Dr. Davidson (thoracic surgery), and Dr. Scarff (neurologic surgery).

For those surgeons who wish to know more about the surgery of children, this book can be recommended; but many competent surgeons will not feel that cervical nodes which have become infected should be left unopened until superficial fluctuation appears.

R. L. G.

Goepp: State Board Questions and Answers

MEDICAL STATE BOARD QUESTIONS AND ANSWERS. *By R. Max Goepp, M.D., Formerly Professor of Clinical Medicine, Graduate School of Medicine University of Pennsylvania; Formerly Assistant Professor of Clinical Medicine, Jefferson Medical College; Formerly Professor of Medicine, Woman's Medical College of Pennsylvania; etc. Seventh Edition, Revised. Philadelphia: W. B. Saunders Co. 1938. Price, $5.50.*

This venerable classic has just appeared in its seventh edition. The revision has been very thorough. Electrocardiography and improved treatment have been emphasized in the section on cardiology. Serum therapy and typing are included in the section on pneumonia. Modern emphasis on the maintenance of chemical balance in the pre- and postoperative care of surgical patients and on the diagnosis of peripheral vascular disease is skillfully brought out. Newer endocrine products are mentioned.

Let the egotistic physician glance through this volume and endeavor to answer a dozen of the questions. After stumbling through them, let him dust off his reference books. The physician who can properly answer a majority of these questions, none of them difficult or obscure and all of direct or indirect value in the field of general surgery and medicine, can rest assured of his grasp of medical knowledge. *The ambitious man who has been out in practice for a number of years can give himself a postgraduate course by studying a few of these questions each day.*

A few corrections may be cited: Under the heading of hemorrhage occurring in the pregnant woman, only placenta previa and premature separation of the placenta are

mentioned; whereas incomplete abortion and hydatidiform mole should also be mentioned, though the first is often obvious and the second rare. "Spotting" or slight bleeding often accompanies ectopic pregnancy, a condition which must be diagnosed as early as possible.

On the whole, this volume should be of great assistance to any physician who is preparing to take a professional examination of any sort.

Fishbein: Medical Writing

MEDICAL WRITING. The Technic and the Art. *By Morris Fishbein, M.D., Editor,* Journal of the American Medical Association; *Assisted by Jewel F. Whelan, Assistant to the Editor. Chicago: American Medical Association Press. 1938. Price, $1.50.*

The leading obstetricians of the 1840's were at great pains to ridicule the theories put forth by an unknown Viennese obstetrician, Semmelweis, and by Oliver Wendell Holmes, as to the cause of puerperal fever. Such fanciful conjectures were not allowed to come to the attention of the great majority of physicians.

In glancing over the "standard" used in measuring the value of manuscripts presented before the American Medical Association, one has the feeling that, even in enlightened 1940, the conservative heads of our profession will commit just such errors as did their predecessors of a century ago. The standard provides that "Papers must (1) contain and establish positively new facts, modes of practice, or principles of real value; (2) embody the results of well advised, original researches; or (3) present so complete a review of the facts concerning any particular subject as to enable the reader to deduce therefrom legitimate, important conclusions."

And who is to say whether research is well advised; who to judge whether a principle is of real value? The implied definition would place the editor and God in the same omniscient category. The theory of today is the fact of tomorrow, and even stranger, the "fact" of today is the exploded theory of tomorrow. (How many medical authorities have advised complete abstinence from food during an acute gastric hemorrhage, so that the stomach would "rest"? Within the past few years we find that the stomach never rests, and that the mortality of gastric bleeding may be halved by frequent feedings).

To quote directly: "The reader depends on the editor not to publish fiction for fact, nor fallacies which he—the reader—is not qualified to detect." In other words, the physician cannot think for himself. It is to be hoped that the general public does not learn that medical practitioners have such grade-school minds that they must be protected against new ideas.

The chapter on "An Acceptable Paper" should be read carefully by every one who feels the urge to write for the medical press. Manuscripts are rejected because (1) there is a plethora of material on one subject, such as tonsillectomy; (2) fancies rather than facts are presented; (3) the paper is submitted for publication exactly as it was read before a medical society; and (4) the paper is verbose, rambling, or diffuse.

The book is replete with practical pointers which cover every aspect of the preparation of manuscripts, bibliographies, illustrations, and charts, their proper assembling and correction. The few pages on illustrations will do much to ensure a better type of clinical photograph, in which the lesion is emphasized. The avoidance of lettering on photographs and diagrams will obviate the loss of clearness when reducing the total size of the illustration. Instead, the description should be given below the drawing as a legend, and numbers or figures used on the drawing to indicate points of special interest.

Dr. Fishbein is witty, as usual. In condemning the use of long titles, he cites as a horrible example: "Brain Tumor of Psychomotor Area, Causing Jacksonian and Generalized Convulsions, Visual Hallucinations: Somatic Operation; Recovery, Mental and Physical," and says, "With that title, why write a paper?"

He feels that unnecessary words, phrases, and sentences should be scrupulously removed from manuscripts. I have the feeling that too much pruning results in stiff, dry articles, although it is quite true that unnecessary words may obscure meaning. There should always be enough words to make good English.

Every physician who writes for publication (and that should include a high proportion of them) needs this book and should study it diligently; but many will be glad that there are independent publications which will give them an opportunity to offer their practical ideas for the intelligent consideration of their confreres.

Stewart and Dunlop: Clinical Chemistry

CLINICAL CHEMISTRY IN PRACTICAL MEDICINE. *By C. P. Stewart, M.Sc. (Dunelm.) Ph.D. (Edin.), Lecturer in Biochemistry, University of Edinburgh; Senior Biochemist, Royal Infirmary Edinburgh, and D. M. Dunlop, B A. (Oxon), M.D., F. R. C. P. E., Christison Professor of Therapeutics and Clinical Medicine, University of Edinburgh. Second Edition. Baltimore: William Wood and Company. 1938. Price, $4.00.*

No practitioner or student can be regarded as being well prepared who does not possess a knowledge of the circumstances in which a chemical examination may be of service; of the interpretation and significance to be placed upon the results of such an examination; and of the technic of obtaining the specimens to be sent to the laboratory for analysis.

This modest volume devotes some 20 pages to consideration of the various methods of

obtaining samples of blood, urine, feces, and spinal fluid, and of preserving them until they can reach the laboratory.

Every aspect of the diagnostic procedures which concern the average general practitioner are discussed under these headings; The basal metabolic rate, the mechanism of neutrality regulation, glycosuria, albuminuria and renal function tests, examination of stomach contents, hepatic function tests, cerebrospinal fluid, chemical tests in pregnancy, the blood calcium and phosphorus, and the blood sedimentation rate.

The authors have been at pains not only to point out the value of certain chemical investigations, but also to *stress their limitations.* This volume can be recommended as a conservative and helpful text.

Krumbhaar: Pathology

PATHOLOGY. One of a Series of Primers on the History of Medicine. *By E. B. Krumbhaar, Professor of Pathology, University of Pennsylvania School of Medicine. New York: Paul B. Hoeber, Inc. (Medical Book Department of Harper and Brothers). 1938. Price, $2.00.*

Now and again we are disgusted or rather discouraged that there is so much yet to be learned regarding human health and disease. An effective antidote is provided by this book.

Read of P. C. A. Louis, who first began the use of the statistical method as an exact instrument of medical investigation and who first differentiated typhus and typhoid by the pathologic findings. Read of Morgagni, the father of gross pathology, and his complete treatises on the pathologic changes in every part of the body. Learn that appendicitis was first described, as "iliac passion," in 1554.

When we read of all that has been accomplished in the relatively short time that men have been studying the human body and its affections, we can hope that our own progress will be as relatively great and that our ignorance will be dispelled.

Not the least interesting section of the book is that one containing "A Chronological List of Pathologic Milestones," which lists important pathologic events.

Davis: Play and Mental Health

PLAY AND MENTAL HEALTH. *By John Eisele Davis, M.A., Veterans Administration Facility, Perry Point, Maryland; Author of "Principles and Practices of Recreational Therapy for the Mentally Ill." New York: A. S. Barnes and Co. 1938. Price, $2.50.*

Your reviewer was a little startled that a book on play should be sent to a medical magazine, and began to read it only from a sense of duty. On closer inspection, however, it is revealed as representative of the sort of thing with which the physicians of the next generation will concern themselves. Instead of waiting for the development of mental disorders and personality difficulties, the physician will plan a program of physical activities that will develop a child's weak points, be they physical or emotional.

Overemphasis on competitive games has been one of the failings of Americans in the field of sport, and the athlete has been lauded, rather than the team. Everyone cannot be a pitcher or a full back, but the feeling of inferiority disappears when it is made clear that a pitcher is only as good as his catcher and fielders, and that a back cannot gain without the help of his teammates.

Play is a valuable means of enabling the individual to make his adjustment from the carefreeness of youth to the responsibility of maturity. This is of especial interest to physicians, as much of the illness that daily confronts them is directly due to the failure of certain people to "grow up" or mature mentally. As they have no feeling of independent strength, they seek refuge in mental or physical symptoms or in alcoholism.

Children may be taught not to fear the dark, not to fear bodily pain, and in other ways to eliminate personality and emotional defects.

Every physician should think in broader terms of health, and those who have children will be especially glad to read this book.

McPheeters and Anderson: Injection Treatment of Varicose Veins and Hemorrhoids

THE INJECTION TREATMENT OF VARICOSE VEINS AND HEMORRHOIDS. *By H O. McPheeters, M.D., F.A.C.S., Formerly Director of the Varicose Vein and Ulcer Clinic, Minneapolis General Hospital; Attending Physician, New Asbury, Fairview and Northwestern Hospitals, Minneapolis, Minn.; and James Kerr Anderson, M.D., F.A.C.S., Instructor in Surgery, University of Minnesota School of Medicine; Adjunct Surgeon, Minneapolis General Hospital; Attending Surgeon, St. Mary's, Abbott and Northwestern Hospitals, Minneapolis, Minn. Philadelphia: F. A. Davis Company. 1938. Price, $4.50.*

Here are *two* monographs for the price of one. Both concern abnormalities of the venous system; both are well written and clearly illustrated; both are necessary to the modern general practitioner.

McPheeters' classic treatise on the rationale of varicose vein therapy, the etiologic factors concerned, the physiology of venous flow in the extremities (illustrated with diagrams and dramatic roentgenograms), the indications and contraindications for injection treatment, the technic, complications and their treatment, is by far the best exposition that has appeared to date.

Anderson's competent consideration of

similar aspects of the hemorrhoid problem will be well worthy of a place on any medical bookshelf, for its own value alone. He feels that large hemorrhoids are not suitable for injection therapy, as a fibrous tumor of considerable size results.

Blanchard: The Romance of Proctology

THE ROMANCE OF PROCTOLOGY. *By C. E. Blanchard, M.D., Youngstown, Ohio. Medical Success Press: Youngstown, Ohio. 1938. Price, $4.50.*

Here is presented, for the first time, the story of the development of proctology as viewed by a modern pioneer in the specialty. Dr. Blanchard has long been an advocate of ambulant proctology; i.e., the treatment of proctologic conditions in the office with the newer technics of injection and minor surgery.

We learn that one of the first workers to inject hemorrhoids sold the secret to numerous quacks, who traversed the country and brought much disrepute on the method and its earlier converts in the medical profession. In fact, it is only in the past few years that it has been "respectable" to believe in injection methods.

Critics have been quick to question the amount of romance in proctology. There is romance in the work that these men have been doing, in their fight against orthodox procedures and non-thinking medical men who cling to old ideas with all the ferocity and irrationality of the followers of Galen. It has always been so much easier to be "conservative," rather than to think in a critical way of one's way of doing things.

The last chapters are devoted to a discussion of the technic of hemorrhoid injection, case histories, treatment of prolapse of rectum by the injection method, and a plea for wider adoption of these simpler, less painful methods.

New Books Received

The following books have been received in this office and will be reviewed in our pages as rapidly as possible.

DISEASES OF WOMEN. *By Ten Teachers. Under the Direction of Clifford White, M.D., B.S. (Lond.), F.R.C.P. (Lond.), F.R.C.S. (Eng.), F.C.O.G. Edited by Sir Comyns Berkeley, Clifford White, and Frank Cook. 6th Edition. Baltimore: William Wood & Company. 1938. Price, $6.00.*

SURFACE AND RADIOLOGICAL ANATOMY. For Students and General Practitioners. *By Arthur B. Appleton, M.A., M.D. (Cantab.), William J. Hamilton, M D., B.Ch. (Belf.), D.Sc. (Glas.), F.R.S.E.; and Ivan C. C. Tchaperoff, M.A., M.D., B Ch. (Cantab.), D.M.R.E. Baltimore: William Wood & Company. 1938. Price, $5.50.*

HOW TO LIVE. Rules for Healthful Living Based on Modern Science. *By Irving Fisher, LL.D.; and Haven Emerson, M.D. 12th Edition Completely Revised and Rewritten. New York and London: Funk & Wagnalls Company. 1938. Price, $2.50.*

IMMUNE-BLOOD THERAPY OF TUBERCULOSIS. With Special References to Latent and Masked Tuberculosis. *By Joseph Hollos, M.D. New York: Joseph Hollos. 1938. Price, $2.00.*

THE SINGLE WOMAN AND HER EMOTIONAL PROBLEMS. *By Laura Hutton, B.A. Lond., M.R.C.S. Eng., L.R.C.P. Lond. With a Foreword by David Forsyth, M.D, F.R.C.P. 2nd Edition. Baltimore: William Wood & Company. 1937. Price, $1.50.*

DISEASES OF THE NOSE, THROAT AND EAR. Medical and Surgical. *By William Lincoln Ballenger, M.D., F.A.C.S.; and Howard Charles Ballenger, M.D., F.A.C.S. 7th Edition, Thoroughly Revised. Philadelphia: Lea & Febiger, 1938. Price, $11.00.*

THE PITUITARY GLAND. An Investigation of the Most Recent Advances. *The Proceedings of the Association, New York, December 28 and 29, 1936. Editorial Board, Walter Timme, Angus M. Frantz, and Clarence C. Hare. Baltimore: The Williams & Wilkins Company. 1938. Price, $10.00.*

THE INTERNATIONAL MEDICAL ANNUAL. A Year Book of Treatment and Practitioner's Index. *Edited by H. Letheby Tidy, M.A., M.D. (Oxon.), F.R.C.P.; and A. Rendle Short, M.D., B.S., B.Sc., F.R.C.S. Baltimore: William Wood & Company. 1938. Price, $6.00.*

ELECTROTHERAPY AND LIGHT THERAPY. *By Richard Kovacs, M.D , 3rd Edition, Thoroughly Revised. Philadelphia: Lea & Febiger. 1938. Price, $7.50.*

SULFANILAMIDE THERAPY OF BACTERIAL INFECTIONS. With Special Reference to Diseases Caused by Hemolytic Streptococci, Pneumococci, Meningococci and Gonococci. *By Ralph R. Mellon, M.D., Dr. P.H., D.Sc. Hon.; Paul Gross, M.D.; and Frank B. Cooper, M.S. Springfield, Illinois: Charles C Thomas. 1938. Price, $4 00.*

Medical News

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Courtesy, Folmer Graflex Corp.

Miniature Photographic Records

THE MEDICAL AND DENTAL professions have long felt the need for an economical method of preserving their ever-increasing records in lasting, space-saving form. Microphotography has filled this need by making it possible to record such material on film. A new invention, the Photorecord (pictured above, in operation), manufactured by the Folmer Graflex Corporation, Rochester, N. Y., places this service within reach of every one who desires it, and it may be used for all purposes where photographic records are desired and space for storage is limited.

The apparatus is a comparatively simple mechanism, and will produce 800 double-frame pictures and 1600 single-frame pictures on a single loading of 100-foot, 35 mm. film.

The complete portability of the equipment makes it ideal for use in various locations.

New Tuberculosis Test

A NEW biologic product, known as *Tebigen*, which is stated to give positive reactions only in active and early-contact tuberculosis, but not in healed cases, is being offered by the Ernst Bischoff Company. It is not made from tubercle bacilli, but from blood fibrin of infected animals, and therefore cannot reactivate quiescent cases, as sometimes happens with the tuberculins.

Loeser Laboratory Expands

LOESER Laboratory, Inc., a pioneer manufacturer of parenteral medications, has purchased the Colwell Pharmacal Corp. and is now located in more spacious quarters at 37 West 26th Street, New York City. R. C. Ringgold, after 35 years with Sharp & Dohme, joins the company as its president.

House Publications

WALTER BUCHLER, ESQ., 154 Hamilton Terrace, London, N. W. 8, England, is compiling a list of the house publications, issued for distribution among their employees or customers, or both, by various firms and organizations throughout the world. He will be glad to receive copies of and information regarding such publications from as many sources as possible.

Obstetrics and Pediatrics

THE UNIVERSITY of Illinois College of Medicine is offering a series of one-week postgraduate courses in obstetrics and pediatrics, beginning each Monday morning throughout July and August, at 9:30 A. M. Instruction consists of lectures, round-table discussions, ward walks, practical demonstrations, etc., in both subjects, designed especially to meet the needs of general practitioners. Write, inclosing a check for $10 (the entire fee for the course) and stating when you wish to come, to Mr. R. G. Moon, 1853 W. Polk St., Chicago, Ill. Check will be returned if the class for that week is filled.

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1 The Pneumonic Lung. Its Physical Signs and Pathology. Denver Chemical Mfg. Co.

4 Taurocol. The Paul Plessner Co.

5 Specific Urethritis—Gonosan "Riedel." Riedel & Co., Inc.

6 Dr. Weirick's Sanitarium. Dr. G. A. Weirick.

8 *Journal of Intravenous Therapy.* Loeser Laboratory, Inc.

9 Elixir Bromaurate in the Treatment of Whooping Cough and other Persistent Coughs. Report of Cases. (Booklet.) Gold Pharmacal Co.

11 Chondroitin; for Treatment of Idiopathic Headache. The Wilson Labs.

13 A Few Notes Regarding Psychoanalysis. Fellows Medical Mfg. Co.

15 Cough—Its Symptomatic Treatment. Martin H. Smith Co.

16 The Therapeutic Value of Chemical Foods. Fellows Medical Mfg. Co.

17 Feeding Diabetic Patients. Knox Gelatine Labs.

19 Menstrual Regulation by Symptomatic Treatment. Martin H. Smith Co.

20 Hyperol. A Utero-Ovarian Tonic and Corrective. Purdue Frederick Co.

21 Gray's Glycerine Tonic Comp. Purdue Frederick Co.

22 Feeding Sick Patients. Knox Gelatine Labs.

25 Clinical Guide for Female Sex Hormone Therapy. Schering Corp.

27 Reducing Diets and Recipes. Knox Gelatine Laboratories.

33 Foot Weakness and Correction for the Physician. The Scholl Mfg. Co., Inc.

38 Protecting the Expectant Mother. Corn Products Sales Co.

41 Oreton—Male Sex Hormone. Schering Corp.

43 Karo Syrup for Infant Feeding. Corn Products Sales Co.

46 Vitafer. A Reconstructive Tonic containing Antianemic Factors with Vitamin B. The National Drug Co.

50 Gestasol. The Follicular and Luteinizing Fractions obtained from Human Placentas. The National Drug Co.

51 Formaldehyde for Urinary Antisepsis. Schering & Glatz, Inc.

54 Use of Zinc Borate in Otolaryngology. Hille Laboratories.

62 Bismuth Subsalicylate in the Treatment of Syphilis. Loeser Laboratory, Inc.

78 Argyrol in Urology and Gynecology. A. C. Barnes Company.

79 Hydrocyanate of Iron—Pharmacologically Correct in the Treatment of Epilepsy. The Tilden Co.

83 Iocapral. An Arterial Antispasmodic. Winthrop Chemical Co., Inc.

89 Free Iodine as a Therapeutic Agent. Burnham Soluble Iodine Co.

91 Adrenal Cortex; for the Treatment of Addison's Disease and Asthenia. The Wilson Labs.

95 Low Cholesterol, Low Fat, Low Caloric Diet List for Distribution to Patients. Burnham Soluble Iodine Co.

96 Eburol, a Healing Ointment for Burns, Wounds and Ulcers. Ernst Bischoff Co.

99 A Survey in Two Fields of Medicine. A. C. Barnes Co.

100 Neo-Plasmoid. The Modern Solution For the Injection Treatment of Hernia. Farnsworth Labs.

103 Sarapin. A New Product. High Chemical Co.

105 Ovoferrin. Iron in its Most Efficient Subdivision. A. C. Barnes Co.

110 Parenteral Calcium Therapy—A Review of the Literature with Comprehensive Bibliography. Loeser Laboratory, Inc.

111 Argyrol in Ophthalmology. A. C. Barnes Company.

112 Oxygen-Ozone and Octozone. Octozone Equipment Co.

116 Alparene—An Effective Sclerosing Solution for the Injection Treatment of Hernia. Dequin Physicians' Products Co.

123 Resumé of Venereal Therapy. Mallinckrodt Chemical Works.

124 Soricin in the Treatment of Intestinal Toxemia. The Wm. S. Merrell Company.

125 Parenteral Therapy of Strontium. Loeser Laboratory, Inc.

126 Subenon—Anti-arthritic and Anti-rheumatic. Seydel Chemical Co.

130 Allantoin Ointment 2% in Slow and Non-healing Wounds and in Burns. The National Drug Co.

135 Argyrol in Otorhinolaryngology. A. C. Barnes Co.

137 Barium Sulfate. Resumé of Use in Alimentary Roentgenology. Mallinckrodt Chemical Works.

139 Standardization of Estrogenic Hormone. Reed & Carnrick.

140 Paramon—Analgesic. Seydel Chemical Co.

142 Anabolin. A Detoxicative Hormone from the Liver. The Harrower Laboratory, Inc.

143 The Physicians' Conquest of Syphilis. The Tilden Co.

144 The Vicious Circle. Schering & Glatz, Inc.

145 ZymenoL—to Aid Normal Evacuation Without Irritant Drugs or Bulk-producing Agents in Both Constipation and Colitis. Otis E. Glidden & Co., Inc.

146 Moru-Quin for Injection Treatment of Varicose Veins. The National Drug Co.

147 Zona Cream and Zona Diaphragms for Contraception. Zonite Products Corp.

148 Ampoule Products for Subcutaneous, Intramuscular, and Intravenous Medication. Associated Physicians Labs.

149 Metanic Jelly. Abbott Laboratories.

150 Constipation and Hemorrhoids. Wm. R. Warner & Co.

151 Cofron Liver Concentrate. Abbott Laboratories.

152 Avoiding the Water Hazard. Wm. R. Warner & Co.

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